





Our annual guide to gadgets and gizmos for your favorite geek.



Check out the most popular IT be of the year, O QuickLink 42969

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300 N ZIDER RD MM ARBOR MI 48183-1553

# Vendor-backed Lobbying Groups Cozy Up to DHS Organizations' self-serving agendas raise

concerns that security burden will fall to users

BY DAN VERTON

When the Department of Homeland Security convenes its National Cyber Socurity Summit in California on West nesday, its stated aim will be to improve cooperation with the private sector. But the question is whether it's coopcrating too closely with IT vendor special interests.

The DHS is hosting the event in collaboration with IT vendor organizations whose lobbying activities are coming under increased scrutiny for pushing an agenda that would place the bunden of security on the government and users rather than on the vendors that sell the products Co-sponsoring the event, to be held in Santa Clara, are the Information Technology Asso-

ciation of America, the Busi-

ness Software Alliance, the TechNet alliance of CEOs and the U.S. Chamber of Commerce. A Computerworld review of the public policy statements of these propos found nothing to indicate that they have ever taken a position that calls on IT vendors to improve the security and quality of their products. Moreover, the vendor groups partnering with the

# Look North, Workers Advised

IT jobs are available in Canada, where pay is lower but so are costs

Unemployed U.S. IT workers may be able to find work in Canada, where near-shore outsourcers take advantage of their country's lower

The average IT salary naid by Keane Inc. to employees at its application development center in Halifay Nova Scotia, is around

costs

\$60,000 Canadian, or roughly \$45,000 U.S., based on recent exchange rates. While that pay rate might seem low to U.S. IT workers.

it's "considerably bigher" than the average salary in the Halifax area, said Stephen Lund. president and CEO of Nova Scotia Business Inc., a government-backed economic

development agency. You can live in Nova Scotia with a lot less money than you can live in a lot of other places," he said. Canada lobs, page 12

DHS this week appear to share an apenda aimed at frustrating legislation that would require companies to conduct thirdparty security benchmarks and report the results each year in their annual reports (Ouick Link 420681. All of those ones nizations played a role in blocking a bill with such roals last month according to officials monthed in destring the legislation who spoke on condizion of anonymity

While many industry executhere snoke on the record about the role of vendor groups in shaping public policy others Lobbying, page 16

## Corporate Users Follow Mono Project

Running Net apps on Linux has appeal but Novell faces obstacles

Plenty of corporate developers watched with great interest when Novell Inc. unveiled a road map for the opensource Mono project that it

acquired with Ximian Inc. That's because Mono could give them a chance to run Microsoft Corn.'s .Net-based anplications on Linux or Unix. Launched in 200L the Mono project is an open-source version of Microsoft's .Net Framework, which includes a runtime for the Common Language Infrastructure, a C#

Mono Project, page 61



The state of the s



Windows XP Professional for Business

NEW! IBM ThinkPad R40

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NEW! IBM ThinkPad T41

tem Features

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With the best data protection available on a wireless notebook, you can work where you like. Knowing there's a power looking out for you.

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Fighting Globalization
DEVELOPMENT: How can computer pros fight
the outsourcing threat? Master business
processes and contribute to value chains, advises Eugene Gilerson, a software arch tect and project manager at TD Waterhouse

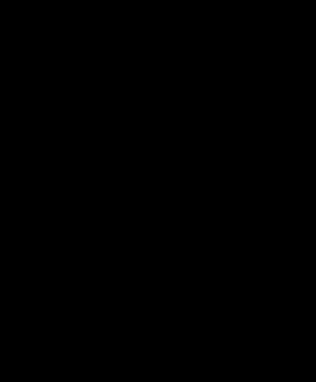
Honeypots Play Key Security Role SECURITY: This intrusion-detection technique can be an important factor in defending your enterprise, says Symantec's John Harrison & Oxfold by 42000

**Managing Access Control Lists** URITY: Access control lists can be diffi-

cult to manage, but they can be an effective tool for helping to secure your network, says Eric Vashinder, a senior product manager at Rendition Networks. He discusses the problems with ACLs and how to man successfully. © QuickLink 42940



PERMINER



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Do you think crosoft's off of a reward will





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Fighting Globalization

DEVELOPMENT: How can computer pros fight the outsourcing threat? Master business processes and contribute to value chains advises Eugene Gilerson, a software architect and project manager at TD Waterhouse.

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Honeypots Play Key Security Role SECURITY: This intrusion-detection technique can be an important factor in defending your enterprise, says Symantee's John Harrison, O OxiokLink 42910

Managing Access Control Lists SECURITY: Access control lists can be difficult to manner, but they can be an effective tool for helping to secure your network, says

Eric Vashinder, a senior product manager at Rendition Networks. He discusses the problems with ACLs and how to manner them successfully: O Quicklink 42949 hat's e QuickLink? DEPARTMENTS

rite. Also, at the end

Breaking News O QuickLink a143

okl.lvk a257

#### Scripting Holes Reported in IE

cooft Corp. said it's inve gating possible security flaws in the Active Scripting feature that's built into its Internet Explorer 6.0 Web browser. Security research ers reported the voluerability and advised uners to disable the there in present attackers from taking remote control of their PCs. Microsoft said it had not on informed of new attacks

# Integration Team Leader Ouits HP

leff Clarks, one of the two everyes who led the integration team paired Compag Computer Corp. ned from his ich as essecutive ice president of global operaions at HP. Clarke was Compaq's thief financial officer prior to the hiel financial officer prior to th lay 2002 merger. HP said his ation "was mutually agreed to and was appropriate." Clarks

## NetApp Upgrades Secondary Storage

letwork Appliance Inc. tomo ns to covell an opprade of its ar as part of a wisier annuar ment involving several products and partnership deals. Sumyvale, Calif. -based NotApp said the Hear-Store R200, which includes an and version of its Snap!

# **CRM Woes Persist**

At AT&T Wireless AT&T Wireless Services Inc. sold It's still struggling with CRM system glitches that have been scling the Redmond, Wash, and company since Nov. 1. An not predict when the problems will be fixed. They are prevents the company from signing up o

# AT DEADLINE | Employment Agency Scuttles India Contract were included among a total

Governor orders cancellation of system redesign contract amid controversy

T THE SINEST of Indiana's governor, a state agency that helps unemployed residents find jobs has canceled a \$152 million IT services contract with a company that planned to import up to

65 workers from India Gov los Kernen on New 20 ordered the Indiana Department of Workforce Development (DWD) to end its deal with Tata America International Corp. as part of a cew plan to overhaul the state's procurement processes. The proposed changes are aimed at ensuring that Indiana based companies get more chances

to win contracts "After having a chance to discuss our vision of hour the state should do business and how we can provide better opportunities to Indiana companies and workers, we concluded that this contract did not fit

in that framework " Koroso said in a statement. Legislators Panned Deal New York-based Tata Ameri-

ca, which is also known as TCS America, was supposed to help the DWD redesion a system used to process unemployment claims and taxes. The DWD awarded the contract to TCS lost summer and work began Nov. 4. But the deal angered some state legislators, who complained that the planned use of Indian proerammers went against the very nature of the DWD's

charter [QuickLink 42838]. Patrick Murnhy, a deputy commissioner at the DWD. last week said TCS will con tinue work oo the contract for 30 days beyond the cancellation date, partly to train IT staffers at the agency on developing Java applications.

The DWD will pay the company for services rendered but won't be obligated to pay a termination fee, Murphy said it's unclear when the DWD will rebid the contract. Murwill review the assency's procurrement procedures "to see if we can give Indiana firms

nhy said the musemor's office more opportunities" to bid TCS best out two other finalists for the DWD coetract - Accenture Ltd. and Deloitte Consulting, No Indiana-based businesses submitted bids, although Murphy said some

of 84 companies that received invitations to attend a prebid conference in October 2002. A snokesman for TCS a subsidiary of Tata Consultancy Services in Bangalore, In-

dia, declined to comment in detail about the cancellation "This is a decision made by the seate of Indiana, and we will abide by it." he said TCS's hid was \$81 million lower than the pext closest offer according to the DWD The agency plans to replace

its current claims and tax processing system, which runs on a Unisys Corp. mainframe. with a client/server application writtee in lava.

After having a chance to discuss our vision of how the state should do business

we concluded that this contract did not fit in that framework.

INDIANA GOV. JOE KERNAN

leff Drozda, a Republican state senator who criticized the contract with TCS, is sponsoring legislation that would han state contractors from using foreign workers on IT projects and other initiatives. Droads said he expects the state Senate's Economic Development and Technology Committee to hold a hearing on the bill today. O 43167

# User Complaints Push Dell To Return PC Support to U.S.

Customers say tech help in India not good enough

Dell Inc. last week said it has stopped routing most of the technical support calls from U.S.-based users of its corporate PCs to a facility in India. after some customers complained about the quality of the help they received.

Support operations related to Dell's Optiplex line of desktoo PCs and its Latitude notebooks are being moved back to facilities in Texas, Idaho and Tennessee, said company spokesman Ion Weisblatt.

"Corporate customers were telling us they didn't like the level of support they were getting, and in the normal cours of business, we made some adiustments," Weisblatt said. Ned May, an analyst at market research firm IDC, said he had also heard criticisms from corporate IT managers about the support they were getting

from Dell's call center in Bangalore, India. May called the shift of support back to the U.S. "an propressive move" that should earn Dell some goodwill from users

Dell'a support flip-flop is also a victory for U.S.-based IT workers, said Marrus Courtney, president of the Scattle-based Washington Alliance of Technology Workers. The problems encountered by Dell ahould show other technology vendors that sometimes "cheaper is not better."

Courtney added. But it may be a short-lived victory. Barry French, another Dell spokesman, said a portioo of the calls from U.S. PC users will still go to India, where support has been handled since mid-2001. He also indicated that Dell may shift all of

the support back offshore at some point, "We are increas ing the number of people we have providing support in In-dia," he said. "Dell has a number of call centers around the world, and we will continue to

potimize those to provide the best customer experience." IDC's May said he sees offshore sourcing, in which IT jobs such as technical support are moved from the U.S. to less expensive countries, as an inevitable trend. "The economies are too compelling."

Dell's decision on PC support was disclosed less than a week after Michael Dell. its chairman and CEO, bullybooed the establishment of a "state-of-the-art" Enterprise Command Center support fa cility in Round Rock, Texas. during a Nov. 18 press confeence at Comdex/Fall 2003 The new facility will pro

vide support to users of Dell's comprate servers and storage devices, Gary Cotsbott, vice president and general manaer of Dell's services unit, said the company set up the center because the expectations of users "continue to go up as we enetrate the enterprise marher . O 43172

ME ON THIS TOPIC

# Aircraft Maker Turns to Sourcing Software for New Military Planes

Airbus says technology will manage procurement of millions of components

BY MATT HAMBLEN Continuing a staged rollout

that began 19 months son Airbut SAS in the coming weeks will expand its use of Webbased software to support all the steps involved in sourcine goods and services for a new military transport plane.

The Toulouse, France-based aircraft manufacturer will use its Sup@irWorld online sourcing system to drive procurement activities ranging from identifying potential suppliers for the A400m program to awarding contracts, said Frederic Geoffrion, project manager for the software, "That's a clear message to suppliers that Sun@irWorld is not a toy." Geoffrion said last mont

Airbus last May signed a contract to make 180 of the A400m planes, at an average selling price of \$100 million each, for use by seven Furn pean nations. Geoffrion said suppliers will bid for contracts oo millions of parts and systems needed by Airbus, which is due to have the first A400m ready to fly in 2008.

#### **Custom Apps** The Sup@irWorld system is

based on a customized version of Ariba Inc.'s sourcing applications, said Geoffrion, Limited use of the system began in May 2002, and an opdated version was added last lune Airbus last month announced plans to use the software to support sourcing processes throughout its operations. The A400m project is the first in

which sourcing will be fully automated Geoffrien said He ooted that more than LOOO buyers at Airbus have used the technology oo various programs and that bids from 1.500-plus suppliers have been processed through the system. Summir World is being used to replace a paper-based approach and has already produced cost savings, Geoffrion

said. He wouldn't divulee any specific figures but said the system lets Airbus solicit bids from many more suppliers. than it could before generaling increased competition and That's important, because

lower prices

to fight everywhere to take the costs down." Geoffrion said Andy Kyte a London-based analyst at Garrner Inc., said Airbus "is further down the track" than most manufacturers in developing Web-based sourcing systems. He estimated that the company has spent more than \$2 million to how and customize Ariba's software. But successful rollouts of sourcing tools can produce a return oo investment in less than a year be said

difficult market, and we have

Kyte, who has been following the Airbus implementation for months, said Sup@irWorld. has been used to automate some of the sourcine operations for the A380 doubledecker aircraft, a \$30-seat

plane that's in the third wear Sunnyvale, Calif.-based Ari

of an eight-year development program with an expected total cost of \$12 billion. Kyte added that roughly

20% of the top 2,000 companies worldwide already use Web-based applications to manage some of their sourcing activities, and he predicted that the figure will grow to shout 90% within two water

bs competes with Frictionless Commerce Inc. in Cambridge. Mass, and FreeMarkets Inc. in Pittsburgh, plus a variety of ERP and supply chain software vendors that sell source ing sechnology as part of their products. But Kyte said Ariba offers a broader set of tools than its rivals and has a strong presence in Europe. © 43137

# Army to Test Passive RFID Tags on Food Shipments

Trial will include temperature sensor devices

The U.S. Army will begin the Defense Department's first test of passive radio frequency Identification (RFID) tags in February, using the same kinds of technology and electronic product code (EPC) standards that Wal-Mart Stores Inc. is requiring its top 100 suppliers

to adopt. But the Army is adding a twist to its pilot: the use of additional RFID tags equipped with battery-powered sensors that can monitor temperatures in the areas where goods are shipped and stored. Those tags are designed to ensure that food sent to troops in the field gets used before its shelf

life is exceeded. Chief Warrant Officer Stephen Moody, a coord of the RFID program at the Army Soldier System Center in Natick, Mass, said last week that the facility has completed final tests of the com popents that will be used in the RFID "proof of concept" demonstration. That includes possive, write-once tags that operate at 915 MHz and the sensor-equipped devices

which function at 2.4 GHz The Army is buying both kinds of tars from Alico Technology Corp. in Morean Hill Calif Paul Drzaic vice president of advanced develcoment at Alico Technology. estimated that the Army will use about 1,000 tags and 12 RFID readers in the pilot test, which will involve the movements of Meals Ready

to Eat (MRE) and canned rations in a simulated bartlefield supply depot set up in San Josquin, Calif. According to Drzaic, the

915-MHz tags are similar to the ones that Wal-Mart intends to use within its supply chain when the retailer's mandate to not RFID tags on shipping pallets and cases goes into effect in lanuary 2005. The Pentagoo issued a similar edict to its suppliers

in October

Moody said the data stored on the taes, including a unique product identifier, the date of manufacture and the name of the food supplier, will conform to EPC specifications being developed by Bostonbased EPCglobal Inc. Wal-Mart also plans to use them.

mipassive' Sensors But Moody said extreme hear such as that experienced in Iraq can rapidly reduce the shelf life of MREs, dropping is from a normal average of 36 months to just one month at a temperature of 102 F. Because of that, the Army has to go beyond standard-issue passive RFID tags, he said

In the test, one of the socalled semipassive devices with temperature sensors will he placed on each pallet of goods. In comparison, regular passive tags will be attached to each box of food on a pallet

The Army is an early adopter of the semipassive technology Drzaic said het be added that such tags could have widespread commercial uses in "cold chain" manage-

ment of perishable goods. One notential drawback is the fact that the devices cost \$10 to \$20 each, although Drzaic said volume production could drive the price down to \$3 or so

As part of the Army's test. nunications from the RFID renders will be sent own an 802.11a wireless LAN that operates in the 5-GHz hand to a stand-alone Dell Inc. comouter running middleware developed by OATSystems Inc. in Watertown, Mass, Monde said QATSeptems is also the systems integrator for the RFID pilot project. O 43173

MORE MEANS

Here's the Plan: Pertagon efficiels will spell out their RFID requirements to supplies at a meeting this wask. QuickLink 43193

Full RFID coverage: (to to our ordine RFID)

#### Microsoft Probes Exchange for Flaw

Microsoft Corn in reportingtion a potential security flaw in Exchange Server 2003 which would be the first found in the software since it was faunched in October. Microsoft said an initial probe indicated that a probiom with the loc-in function for Exchange's Outlook Web Access nest occurs when users disable the software's Kerberos authentication.

#### Sprint Sets Plan to Cut 2 000 Johs

Sprint Corp. said it plans to lav off about 2,000 workers by year's end, including some of its II staffers. The cuts will affect Sprint's corporate and consum siness units. They're being made in addition to workforce reductions that will accompany an plication development outsourcing deals Sprint announced in Sectember with IBM Global Services and Electronic Data Systems Corp.

#### **HP Adds Storage** For Small Users

Hewlett-Parkard Co. appropriat a consolidated line of disk storage devices aimed at small and Ssize users in a bid to make its product offerings for such rusers less confusing. HP also added a series of packaged sysws that combine its Storage-Works Medular Smart Array devices with its ProLiant servers. Prices start at \$3,200.

#### Linux Lab Takes Sides Against SCO Open Source Development Lubs Inc., which is funded by a group of Linux vendors, published a paper opposing The SCO Group

inc.'s legal attacks against Linus. The paper was written by Co-lumbia University professor Eben ion and presented at an Octing of the organizaMARK HALL CON THE MARK

# Spam Exterminator Proiect Kills 99% . . .

of incoming nuisance e-mails, and that's before you begin applying basic spam-filtering techniques such as blacklists or subject-line analysis, brags leff Brainard, product marketing director at Mirapoint Inc. in Sunnyvale, Calif. The messaging appliance company's upcoming spam fighter, code-named Exterminator, will likely hit the market in OI 2004. Brainard is mum on the details, but he does reveal that the high

level of success the product is having during its testing phase is a result of content-analysis techniques. And false positives are kept to a bare minimum, he says Mirapoint is also experimenting with what can only be called a network-effect method to manage both soam and virunes. That is, if you're among the few thousand users of Mirapoint messaging appliances. you'll be able to opt into a system that links you with other Mirapoint users so that spam or viruses that get caught in your trans can be identi-

fied to others in the chain and automatically set filtered out. As this feature links more users, fewer spam and virus-laden messiges will get passed along. Who'd have ever thought snam would bring us all together? Kumbaya to you, too, dude. OuterBay Technologies Inc. in Camebell. Calif., struck a nice pot of sold when it inked a deal with EMC Corp. (see story

page 16) for its information life-cycle management software Sources also re-

grase Siebel and SAP applications [OuickLink 38966] will be ready in the first quarter. After that, OuterBay plans to release tools to manage the archiving of Outlook and Notes e-mail in the first half of 2004. If you've got remote sites to monitor but don't have a virtual private netthis week's release of SilverBack 4.0 from SilverBack Technologies Inc. in Billerica Mass. The upgrade adds Secure Sockets Laver to the company's remote VPN

Holiday Penguin we a retail proce of \$399.

monitoring canabilities for secure interconnections between remote sites and you data center. When you load

software called Silver-Streak at your remote sites, the offering uses vither a VPN or SSL to report on the status of network components such as uninterruptible power supplies, routers and desktops to a central management console. The upgrade adds alert suppres sion to the tool so that if a router fails, octwork managers receive only one

every device unable to connect to the network through the downed rooter Pricing depends on the number of devices monitored . Bandwidth enows and grows, and that can mean only one those a bigger fire hose of data aimed at your serv-

er's CPUs. A 100Mbit/sec. Ethernet connection shoots 148 (00) packets per perand at your server. When you apprade to 10Gbit/sec. Ethernet, that jumps to 14.800.000 packets. Although faster microprocessors and more of them in your server will beln a more efficient anproach might be to add a protocol accelcrator to your server. Maybe one from Astute Networks Inc. in San Diego, The PAIGO Super HBA is designed to offload unsecured TCP and iSCSI protocol processing, so servers as well as disk arrays. in a storage-area network or network attached storage can benefit from the protocol acceleration. The PA1000 Super HBA has four standard RJ-45 network ports, and it plugs into a single PCI-N slot. If you need to process packets securely, the SA1000 can accelerate SSL and Psec alone with the other protocols via a chip from Astute's partner Cavium Networks Inc. in Sonta Clara, Calif. Volume manufacturing won't start until next quarter, and you'll initially need to order the accelerators through your server or

array supplier. Tying asset management with work-order operations seems postry smart. That's what the folks at Curnor-Post Software LLC in Duffield, Va. have done. Their new Total Frack ASP style service goes five this week. Access to TotalTrack is role-based, so you can let end users enter information about their assets or work-order needs, or you can route the requests through systems ad-

ministrators. Road warriors will be able to get or give data with handheld devices and tablet PCs beginning in Ol. Annual service-provider fees begin at \$600 for education clients O 4305

# Oracle Plans Proxy Fight With PeopleSoft

Executives at Oracle Corn. last week reaffirmed their intention to pursue the company's hostile bid to buy People-Soft Inc. and said Oracle will propose its own slate of proacquisition directors as an alpermetines to December of the housest Oracle has been the unwanted suitor of PeopleSoft since June.

PeopleSoft hasn't set a date fur its 2004 sharebolder meeting, but Oracle intends to nominate a list of replacement directors next month. Safea Catz, an executive vice president at Oracle, said the comruny will submit a slate of candidates even if U.S. and European regulators have yet to approve the takeover. Care and two other execu

tives tried to disnel rumors that the software vendor would throw in the nawel hecause of PeopleSoft's poison pill provisions and U.S. and European regulators' decisiuns to extend their probes.

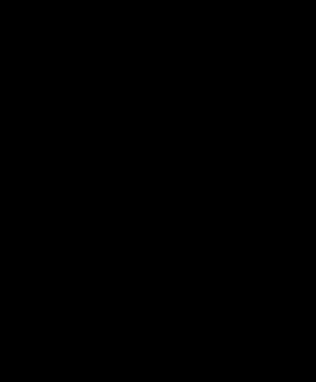
"We remain committed." said Chuck Phillips, another vice president, although be added that Oracle won't ray an unreasonable price for PeopleSoft and that it's investigating other potential mervers

A PropleSoft spokeswoman declined to comment on Oracle's plan to seek control of the Pleasanton, Calif-based company's board. But she said that PeopleSoft officials "are not apprehensive" about a proxy fight with Oracle.

Andrew Ball, a London hased analyst at Front & Sulfavan Inc., said the number of PeopleSoft users looking forward to a merger with Oracle can "be counted with the fingers on one hand. Throw in the regulatury delays, and Or acle's ability to convince itself that this deal still makes sense is one of the wonders of the modern world." O 43134

#### TAKEOVER SAGA For full coverage of Chacle's bid to buy PeopleSalt, go to our Web site

QuickLink a3320



## BRIEFS

#### Microsoft Prohes Exchange for Flaw

Morrowit Corp. is investigati tential security flow in Ex-age Server 2003, which said he the first found in the are since it was laure in October, Microsoft said an ini tial probe indicated that a probion with the log-in function for Exchange's Outlook Web Access nt occurs when users

#### Sorint Sets Plan to Cut 2.000 Johs

Sprint Corp. said it plans to lay off about 2,000 workers by effors. The cuts will affect es units. They're being ade in addition to workforce reone that will accompany apelien development outsourcing als Sprint announced in Sep-mber with IBM Olobal Service

#### HP Adds Storage For Small lisers

Howlett-Packard Co. an medicated line of disk stor and devices aimed at small and ize seers in a bid to make its oduct offerings for such cusers less confusing. HP also ried a series of packaged sys-res that combine its Storage-orks Modular Smart Array deoes with its ProLient servers.

#### Linux Lab Takes Sides Against SCO

Open Source Develo inc., which is funded by a group of Linux vendors, published a pa-per appealing The SCO Group inc. a local attacks against Lin ex. The paper was written by Co-kerobia University professor Eben sted at an Ocn and ores

MARK HALL ON THE MARK

# Spam Exterminator Project Kills 99%

... of incoming nuisance e-mails, and that's before you begin applying basic spam-filtering techniques such as blacklists or subject-line analysis, brags leff Brainard, product marketing director at Miranoint Inc. in Sunnyvale, Calif. The messaging appliance company's upon spam fighter, code-named Exterminator, will likely hit the market in OI 2004. Brainard is mum on the details, but he does reveal that the high

level of success the product is having during its testing phase is a result of content-analysis techniques. And false positives are kept to a bare minimum, he says Mirapoint is also experimenting with what can only be called a network effect od to manage both snom and vinuese That is, if you're amone the few thousand users of Miranoint messaging appliances you'll be able to got into a system that links you with other Miranoine users so that soum or viruses that get caught in your traps can be identified to others in the chain

and automatically get filtered out. As this feature links more users, fewer spam and virus-laden messages will get passed along. Who'd have ever thought spam would bring us all together? Kumbaya to you, too, risds. · OuterBay Technologies Inc. in Campbell Calif, struck a nice pot of gold when it inked a deal with EMC Corp. (see story, page 16) for its information life-cycle management

software. Sources also re-

grate Siebel and SAP applications [QuickLink 38966] will be ready in the first quarter. After that, OuterBay plans to release tools to manage the archiving of Outlook and Notes a-mail in the first half of 2004. • If you've got remote sites to monitor but don't have a virtual private network - or even if you do - consider this week's release of SilverBack 4.0 from SilverBack Technologies Inc. in Billerica. Mass. The upgrade adds Secure Sockets Layer to the company's remote VPN

> won remote altes and you data center, When you load software called Silver-Streak at your remote sites, the offering uses either a VPN or SSI to report on the status of network components such as uninterruptible power supplies, muters and desktops to a central manage ment console. The upgrade adds alert suppression to the tool so that if a router fails, network managers receive only one

alert instead of one for

monitoring capabilities for

secure interconnections be

every device unable to connect to the network through the downed router Pricing depends on the number of devives monitored. 

Bandwidth grows and grows, and that can mean only one things a biomer fire hose of data aimed at your servar's CPUs. A 100Mbit/sec, Ethernet connection shoots 148,000 packets per second at your server. When you upgrade to lOGbit/sec. Ethernet, that jumps to 14.800,000 packets. Although faster microprocessors and more of them in your server will belp, a more efficient ap proach might be to add a protocol accel

grator to your server. Maybe one from Astute Networks Inc. in San Diego. The PA1000 Super HBA is designed to offlood unsecured TCP and iSCSI protocol processing, so servers as well as disk arrays. in a storage-area network or networkattached storage can benefit from the protocol acceleration. The PAI000 Super HBA has four standard RJ-45 network ports, and it plues into a single PCLX slot. If you need to process packets securrely, the SA1000 can accelerate SSL and Pasc along with the other protocols via a chip from Astute's partner Cavium Networks Inc. in Santa Clarz, Calif. Volume manufacturing won't start until next quarter, and you'll initially need to order the accelerators through your server or array supplier. Tving asset management with work-order operations seems overty smart. That's what the folks at Corner-Post Software LLC in Duffield, Va., have done. Their new Total Track ASP-style service goes live this week. Access to TotalTrack is role-based, so you can let end users enter information about their as-

sets or work-order needs, or you can route the requests through systems administrators. Road warriors will be able to get or give data with handheld devices and tablet PCs beginning in Ql. Annual service-provider fees begin at \$600 for education clients. Q 43115

# weal that modules to mis-Oracle Plans Proxy Fight With PeopleSoft

Executives at Oracle Corp. last week reaffirmed their intention to pursue the compam's hostile bid to buy People-Soft Inc. and said Oracle will propose its own state of proacquisition directors as an alative to PropleSoft's bosed Oracle has been the unwanted

suitor of PeopleSoft since June. PeopleSoft hasn't set a date for its 2004 shareholder meeting, but Oracle intends to nominate a list of replaces

directors next month Safes Catz, an executive vice president of Oracle said the over pany will submit a state of candidates even if U.S. and European regulators have yet to approve the takeover Catz and two other execu-

tives tried to dispel rumors that the software vendor would throw in the towel because of PeopleSoft's poissonpill provisions and U.S. and European regulators' decisions to extend their probes

said Chuck Phillips, another vice president, although be added that Oracle won't nav an unreasonable price for PeopleSoft and that it's investigating other potential mergers. A PeopleSoft spokeswoman

declined to comment on Oracle's plan to seek control of the Pleasanton, Calif.-based company's board. But she said that PeopleSoft officials "are not apprehensive" about a proxy fight with Oracle.

Andrew Ball, a London based analyst at Prost & Sollivan Inc., said the number of PropleSoft users looking forward to a menter with Oracle can "be counted with the fingers on one hand. Throw in the regulatory delays, and Oracle's ability to convince itself that this deal still makes sense is one of the wonders of the modern world." O 43134

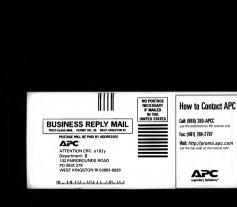
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InfreStruXure" AIR "APC had the plan of building air conditioning systems

in the rack. In a traditional data center, you always have racks which are totally filled with CPUs and which become very hot. Then you have racks which are not deployed at all To manage the energy, the warmth and the consumption of electricity in those racks, we believe that with APC was have found the right solution."

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Merchants expect growth in cybercrime to keen nace with increase in Web sales

■HE HOLIDAY shopning season normises to be a busy one. not just for Internet retailers, but for opportunistic online fraudsters and identity

thieves as well. As a result, Internet merchants — especially the smaller ones - will need to make cure they have adequate fraud- and theft-detection processes in place before the rush begins, industry experts

warned "I think the problem is going to be real bad," said Tom Mahoney founder of Marchant 911, a 1,600-member on line forum in which merchants can share fraud-prevention

information. 'All the projections we're seeing are for a significant increase in online sales. Because of this rush, there will he less time for smaller merchants that do some or all of their own fraud screening to do it well " Mahoney said They should expect an increase in the number of successful fraudulent transactions and lost dollars as a result. he predicted

## Using the Right Tools

However, the growing availability of fraud-detection tools and services should help. said fulie Fernerson, co-chairman of the Merchant Risk Council, a fraud-flehting group in New York

For instance, merchants can use so-called geolocational tools that scan IP addresses to identify orders that are being placed from outside the country. Fergerson said.

Similarly, new card-verification methods that are available from all of the major credit card companies allow mer chants to ensure that the per-

son entering the card rumber actually has the cord in his possession And fraud-datestion services, which cost between Scents and \$1 per trapsaction, let merchants automatically flag suspicious transac-

tions. Fergersoo noted Anaconda Sports Inc., a Kingston NY shosed online sporting goods retailer, has signed up for one such service from VeriSign Inc. in Mountain View, Calif. For 8 cents.

tom Announda's terrores and looking for stolen credit cards verifying addresses and identifying purchases attempted from outside the country. The service has beloed the compa-

my reduce had debt and charpebacks because of fraudulent transactions said Robert Mover director of infeatousture operations at Anaconda

VeriSign, which provides payment-processing services for more than 97,000 North American businesses and processed nearly \$7 hillion in online retail sales in the

third quarter is seeing a substantial increase in transaction volumes point into the shopnine season. The number of transactions on its networks jumned from 61 million in the third quarter of 2002 to more than 91 million in the same quarter this year, and that figure is continuing to rise enter-

Along with that growth has come a sharp spike in fraudu-Heale a dissessor with Masi-Sign's fraud-prevention serpears to be alive and kicking.

ing December

lent transactions, said Trevor vices. "While e-commerce apthe expects rate in the levels of fraud appear to be growing at the same rate as well." Healy said. "What we are seeing is about 3% to 4% of a retailer's bottom line being consumed by fraud." @ 43107



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# Users Proceed Cautiously On Web Services Track

Concerns remain about security. interoperability,

performance BY CAROL SLIWA

IBM. Microsoft Corp. and other vendors that have been pounding the Web services drum for more than two years claim that more and more of their customers are building Web services. And to a degree,

they're right. But the spotty levels of adoption by corporate users was plainly evident in a random poll of 15 IT professionals at Gartner Inc.'s recent Application Integration and Web Services Summit here.

Some had taken a serviceoriented development approach that yielded a growing

collection of Web services. But more said that although they think it's the right direction, they're just getting started, with few or even just one Web service in production. Others expressed skeeticism about the prospects of Web

services to address their complex integration woes "I don't think the infrastructure is in place to enable the throughout " said Pier Poeeis eter, an application architect at Old Mutual PLC, a financial services and insurance firm in

Cape Town. Poteinter who works with mainframes, said Web services may have their place where response time doesn't matter. But in his opinion, latency problems will need to be resolved before Web services can handle high throughput

> Web Services Gotchas

" Big files move slow! O Servines must be deacross a natural Jonathan Petrus, a manager in the ingegration project office at NASA's Marshall Space Flight Center in Huntsville Ala, said be can foresee Web

services being useful for information exchange with the nublic For instance NASA next spring plans to advertise iob openings through Monster.com and use a SOAP adapter from SeeBeyond Technology Corp. to enable résumés to get into its backend systems through a Web service, Pettus said.

But he said NASA has no plans for a full conversion to Web services to get internal amplications to interoperate "How long is it going to take us to get the thousands of applications that we have in NASA Web-serviceable?" Petrus said

"That's not going to happen." Gartner analyst Roy Schulte estimated that 95% of the Web services being done today are internal between single-vendor systems on the client and server sides. "You don't mix vendor SOAP stacks in 95% of the cases because they don't work togeth-

er if you're trying to do anything (ancy," he said. Schulte added that there won't he "pluggable interoper shility with no customization.

except for the simplest of applications," for at least five years, since vendor implementations will continue to vary. He also predicted that Web services between heteroge neous systems over HTTP in high-throughput, low-latency scenarios won't be possible in the foreseeable future But simple SOAP-based requestand-reply messages over HTTP work today, and reliable messaging and security

will improve be added The Web Services Interoc crability Organization, led by IBM and Microsoft, has been working to resolve the thornier issues. In the mean time, companies committed to Web services are working

around the limitations. Gary Lien, a system architect at Life Time Fitness Inc. in Eden Prairie, Minn., said his company's external Web services are of a single-partner nature, so it is able to deal with security. Life Time gets around the issue of reliable messaging by doing only syn-

he added. O 43133

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# BRIEFS

#### Corel Searching For a New CFO

Corel Corp. said it's looking for a new CEO to replace Durek Bur-ney, who was named chairman of the software vendor. Amip Mohta, an executive from the re-based Corel in August, is aking over as interim CEO while he search proceeds. Corel said turney will help shape its product logy and work to identify new

# Linux Group Hit by

Server Attacks The group that organizes the open-source Debian Linux devel sent project said four of its. rvors were compromised in a citing incident. The intrusions empted the group to suspend e-mail service through the De-blan.org domain and lock user accounts on its other systems. But it said an update of the Dobian Linux operating system reand on Nov. 21 wasn't affected

## SUSE Upgrades

ersions of Linux SERF Limer Aft in Maramburn Germany, released a free upgra of its Linux distribution for servers, adding an updated ope oling system larved and other fea-hares. SUSE, which last month agreed to be acquired by Novell Inc., also made available a down load of its SUSE Linux 9.0 deektop operating system.

# Pivotal in Talks With

Hong Kong Vendor Photal Corp., a CRM software vendor in Vancouver, British Co-lumbia, today plans to ansounce shother it has agreed to a buye by Hong Kong-based Chinadotcom Corp. To give itself more time to regetiate with Chinadelcom, Pivetal postponed a shareholders' vote that had been scheduled for w. 21 an a proposal to combin a company with Tallema Corp.

#### Continued from page 1 Canada Johs

And Keane is hiring. The company last month launched a national recruiting drive in Canada for its Halifax center now at a head count of 300 and growing 30% annually, a Keane spokesman said.

Although Boston-based Keane doesn't actively recruit in the U.S. for its Canadian center, it welcomes U.S. workers, who make up about 5% of its workforce there

Other Canadian service providers are also hiring, but none annears to be actively recruit. ing U.S. workers. They're finding what they need from Cansda's labor pool, although they encourage U.S. IT employees

to compete for jobs there. "There is always a demand for good IT people, but to say there is a shortage - I wouldn't say that \* said Peter Thomps son, CEO of RIS Resource Information Systems Inc. The Calgary, Alberta-based nearshore services provider employs approximately 400 workers, and that number is growing annually by about

#### 20% he said Open Invitation

CGI Group Inc., which is Canada's largest IT company in terms of the oumber of its employees, increased its head count by more than 5000 in the past year, from 14,600 to more than 20,000. Half of that growth came from acquisitions of other companies.

"We've been quietly srow ing very rapidly," said Fileen Murphy, a spokeswoman for Montreal-based CGI Group. She said some of the Canadabased workers are likely U.S. expatriates, but the company doesn't maintain such statistics. It hasn't had to recruit in the U.S. to fill Canadian jobs, Murphy said.

But a ton Canadian government official, Keith Parsonage, director general of Industry Canada's Information and Communications Technologies branch, said there's a demand for U.S. workers in Canada, and the country has a liberal immigration policy to encourage IT workers to head north. All IIS workers need in to have a job offer and meet certain educational and training criteria, he

Canada's computer services sectoe errow 3.2% in

2002, according to covernment statistics. But total IT employment in Canada. estimated at shows 600 000 workers declined 1 3% last vear.

Less Bad

million in 2001 to according to a renort released last month by AEA, an industry trade group

in Washington. Still, no one is saying that Canada is at the end of the IT rainbow. Canadian IT recruiters say they see little evidence of a big rebound in the Canadian tech

The U.S. hightech industry, in comparison lost 8% of its inhe last ware declining from 6.5 4 million last year,

115 workers in Canadian jobs. "I don't sense that Canada has any economic advantage in terms of opportunities over what the States can of fer." said Murray Conron. 20 IT recruiter at D.I. Hart & Associates in Toronto, "I do not see trends that ITS profeetingals are looking for jobs up berr." O 43164

sector, or much interest from

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was a phenomenon of talent moving down to the States dur-ing those boom years. But we

# Ottawa's Pitch: 'Come to Canada'

U.S. IT workers are meded and encouraged to take jobs in Caneda, said Kelth Pursonage director general of industry Canada's information and Com munications Sectionologies branch. In an interview last we nputerworld's Patrick tu, Parsonage dis-I the opportunities estyle that await [] ritors in Canada, Ex-

y U.S. companies an ling application and

airtionance development ork to Conada, What impo that having on your IT se ter? It is very difficult to break wn the statistics overall. But the computer services area. in the late 1990s and the down turn, continued to grow stead by at 8% to 9% a year, it was not affected at all by the tech.

The value of the Camelian dellar, though still favorable to the U.S., has been on the rise. What impact will that have an meer-shore develop meet? I think it's going to for it to be that much sherper. But I don't think it's going to rise to where you will see a loss of our

What are year cost advan-

confers very significant benefits to employers. We have a univer sal health care program here in Canada

So the employer in Consols page a fraction of what a U.S. m pays for health core? activ. That's one of the ressons why we're so con scares of the diffe ence in health care co

The other big issue is turnover. For some strange reason, Care deans are cretty lovel to their

How healthy is your technol-ogy labor market? At the mo-ment, we have over 600,000 [17] workers. As of September, the unemployment rate for [IT] professionals was 4.8% vs. an overall unemployment rate

Canada has suffered a brain drain of talanted tech work-ors leading to the States, in that reversing? Cortainly there

o had talent from around the rid pouring into Canada be-use we had a much more lib-i investment policy, perticutrack them into the country. Which is quite different from H-18 vise process which you have in the States.

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# ROBUST OBJECTS <u>AND</u> ROBUST SQL



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Continued from page I

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tech industry in comparison, lost 8% of its jobs last year declining from 6.5 million in 2001 to 6 million last year. according to a re-

in Washington Still, no one is savine that Canada is at the end of the IT rainbow. Canadian IT recruiters say they see little evidence of a big rebound in the Canadian tech

sector or much interest from U.S. workers in Canadian jobs. "I don't sense that Canada has any economic advantant in terms of opportunities over what the States can of fer." said Murray Conron, an IT recruiter at D.L. Hart & Associates in Toponto "I do month by AEA, an not see trends that U.S. professionals are looking for jobs

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The value of the Canadian dollar, though still invorable to the U.S., has been on the rise. What impact will that have on near-shere develor nt? I think it's going to force it to be that much sharper. But I don't think it's noing to rise to where you will see a loss of our

competitive edge. What are your cost adventages? Our health care system In employees. We have a universal health care program here in

So the employer in Canada pays a fraction of what a U.S. irm pays for health care? Exactly, That's one of the reasons why we're so competitive because of the differ-

ence in health care cost The other big issue is timover For some strange reason, Canadises are contry level to their

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# Users Struggle to Pinpoint Sarbanes-Oxley IT Costs

Many see it as an ongoing effort with no real end in sight

ARBANES-OXLEY readiness costs can be band for companies to pin down, partly because complying with the new financial population law ion't a one. time event like Y2k

For instance Essence Chemical Co. hasn't even tried to evaluate the IT costs associated with its Sarbanes-Oxley Act compliance initiative said Mark Montgomery, director of administrative operations support and technology systems at the Kingsport, Tenn,-based chamical makes the sound that the required work is viewed as "an onzoone offort."

not a finite project. Montgomery and several other corporate managers said Sarbanes-Oxley's mandate that companies annually document and attest to the effectiveness of their financial controls means that compliance work will have to be done on a

continual basis "A lot of people have this mind-set that it's a one-time project," said Kyle Didjer, vice president of finance at Regis Corp., a Minneapolis-based operator of 9,700 hair salons in the U.S. and Europe. But he added that he expects Regis to test its internal financial controls regularly using a software tool called Certainty that was developed by Movaris Inc. in Campbell, Calif.

Revis has been working on Sarbanes-Oxley readiness for the past nine months and expects to complete an initial round of documentation and testing by year's end. Didier said the company will likely incur slightly more than \$100,000 in IT costs over the course of its compliance effort. That includes both softJohn Van Decker, an analyst

at Meta Group Inc. in Stamford. Conn., said most companies are currently focusing on requires CEOs and chief financial officers to certify the effectiveness of the financial controls they have in place. Companies with market care talizations of \$75 million or more have to comply for fiscal wears that end on or after hand 15, 2004, Smaller businesses.

and foreign-owned companies have until April 15, 2005. Financial Executives International, a Florham Park, N.L. based association of corporate finance managers, surveyed its members last May on cost esCompliance Costs

\$480k....

timates for complying with

Section 404. On average, the 83 respondents expect to spend about \$480,000 on software, consulting services and employee training in advance of the compliance deadlines. Mark Nagelyoort, vice president and internal control manaper at Hudson United Bank

sidiary of Hudson United Boncorn expects its IT costs tied to Sarbanes-Oxley to come in at less than \$500,000, though he declined to be more specific. That includes the bank's use of a software tool called SOXA Accelerator from HandySoft Global Corp. in Vienna. Va., plus expenses for 10

IT staffers who will spend between 5% and 10% of their time working on Sarbanes-Ov. ley readiness We're saving significant almost all in-house persón

dollars because we're utilizing nel," Nagelyonet said. And because the banking industry is highly regulated, much of the information that Hudson Unit. ed needs has already been

higher percentage of funding

to strategic projects, partly as

a result of its ability to reduce

IT maintenance costs through

Rubin said that in the insur-

ance industry, "we're seeing

somewhat of a recovery mode

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invest more bessel-

ly in warehousing

applications to in-

crease efficiency

and tighten links

with suppliers.

and distribution

manufacturers to

companies moving along at

offshore outsourcing

AMR Research Inc. in Boston. estimates that on average Fortune 1.000 companies will soend about \$2.5 million on Sarbanes-Oxley work this year Technology costs represont legst 5% to 10% of the overall tab. Harrery said although that doesn't reflect the cost of the IT-related staff time being dedicated to com-

Hauerty added though thus it's tough to pinpoint an average IT spending figure for Sarbanes-Oxley "because it's influenced by organizational and systems complexity." O 43114

If the results of A panel discusses the sale of III monagers in Sasharus Order

For more stones about men. Obley pages, yout our Web site.

# Some IT Purse Strings May Be Loosened Next Year

Forecasters predict small increase overall but say spending plans differ by industry

BY THOMAS HOSSMAN IT managers who have quickly tracted to demands for costcutting over the past three years could see a payback in the form of discretionary spending increases next year. according to several reports and interviews with CIOs.

But 2004 IT spending plans vary widely by industry, said Howard Rubin, executive vice president at Meta Group Inc. in Stamford, Conn. For example. Meta predicted in a report released Nov. 18 that the insurance and manufacturing sec-

tors will each see double-digit percentage gains on a year-over-year basis, while spending in the banking and energy industries will decline by

12% and 15%, respectively Meta's projected 12% in crease in insurance IT spending maps with plans at Reinsurance Group of America Inc. in Chesterfield, Mo. Demand for new projects from its business units will drive a 12.4% rise in tech spending next year even though Reinsurance Group's IT infra-

Structure costs continue to docline, said Rick Nolle, the company's vice president of IT. Allstate Insurance Co. hasn't finalized its 2004 IT budget But Cathy Brune, Alistate's

> officer vaid the Northbrook III. company won't spend any less than it does this year. It also exprets to allocate a

The forecasts are based on an independently funded survey of 860 IT managers in 21 industries chief technology Another reason why manu-

facturers might see a boost in IT spending is "the fact that they haven't spent anything Inn discretionary projects I for the past two and a half years." said John Parkinson, chief technologist for the Americas

QuickLink a3250 region at consulting firm Cap Gemini Errest & Young U.S.

LLC in Chicago In a report released last month. Forrester Research Inc. predicted that the retail and insurance industries will see the largest increases in [T spending pext year. But Forrestor's forecasts are relatively modest. Analyst Tom Pohl

budgets in those two industries will likely rise by 4.4% and 3.4% respectively. The report, funded by Cambridge. Mass.-based Forrester, was based

on a survey of 820 IT executives in October On the other hand, National Grange Mutual Insurance Co. in Keene, N.H., plans a slight drop in its IT budget, CIO loel Gelb said that improved governance, including the use of

portfolio management techniques, has helped the compamy "focus IT efforts and control costs." O 42803

external auditors, he added. John Hagerty, an analyst se

documented for internal and

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Compliance Costs

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87 THOMAS HOFFMAN ARBANES-OXLEY readiness costs can be hard for companies to pin down, partly because complying with the new financial reporting law isn't a onetime event like V26

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to strategic projects, partly as Gemini Ernst & Young U.S. a result of its ability to reduce LLC in Chicago In a report released last month, Forrester Research Inc. predicted that the petuil and insurance industries will see the largest increases in IT spending next year. But Forrester's forecasts are relatively

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Grange Mutual Insurance Co. in Keene, N.H., plans a slight drop in its IT budget. CIO Joel Gelb said that improved governance, including the use of portfolio management techniques, has belped the compe-ny "focus IT efforts and con-trol costs." © 42803

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Another reason why man facturers might see a boost in IT spending is "the fact that they haven't spent anything [on discretionary projects] for the past two and a half years," said John Parkinson, chief technologist for the Americas

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#### Continued from page 1

## Lobbying

said privately that they agreed with the general perception that such groups are pushing political agendas at the cost of improved security.

"TIAA and BSA cootinue to put forth resistance that seems based more on visceral than lopical grounds," said the president of another industry consortium that regularly deads with these groups. "They continue to say that externally defined security requirements, either from the government or users, stifle in-novation, which strikes me as "

a classic red herring."
Amit Yoran, director of the
National Cyber Security Divition at the DHS, said that in
his interactions with the vendoor groups co-possoring the
summit, he has winessed "a
genuine interest and eeier to
improve the state of cybersecurity." And while the concern
about vendor resistance to
regulation is a valid one. Viocan
said, vendors are for the most
put "putting their money

"Before advocating specific legislative initiatives, they want to have a good, clear understanding of the upside and the impact of that legislation with respect to its effect on industry," said Voran. "We need to make sure we ideotify how they can improve the quality of their software, not just hold them accountable for doing it. We can't just say that software will be more secure because.

# Taking Responsibility TechNet President Rick White said there's on question that cybersecurity is a multifaceted problem that the vendor community must also take respon-

we mandate it "

sibility for.

"There's already a lot of pressure on a lot of people to deliver the right products and minimize problems," said White. "[But] even if we start delivering better products to-morrow, there's still going to be a cybersecurity problem."

The BSA and the Chamber

The BSA and the Chamber of Commerce didn't respond to requests for comment. Harris Miller, president of the Arlington, Va.-based ITAA, dared anyone to match the

We the consumers and businesses should be held responsible. If we continue to buy Swiss cheese, they'll continue to

KEITH MORBAN, CHIEF OF INFORMATION SECURITY TERRADON COMMUNICATIONS BROUP

sell it

Miller said.

ITAA's leadership oo security.
"If you write anything other
than that ITAA is the leader in
identifying the issue of cybersecurity as a critical issue for
our economy, our government,
our society and IT users, you
would be factually inaccurate."

But the practice of raising awareness isn't what users and analysts are questioning. It's the vendor community's economically driven agenda to avoid regulation that would increase development costs and reduce profit mannins. IT "I don't see any of these organizations promoting security," said MacDonnell Ulsch, managing director of Janus Risk Management Inc. in Marlborn, Mass. "They are promoting agendas [that] doo't make this a more secure world."

# feet the bottom line," said Kellermann. Misdirected Effort Buck Fleming, the acting exec-

utive director of the Cyber Incident Detection & Data Analysis Coeter, a Philadelphia-based volunteer partnership of more than a dozen IT vendors, user companies and the FBI's Infractant program, said the lobbying power of some vendor groups is preventing new ideas from getting

an audience on Capitol Hill. "We made the mistake of spending time, money and brainnower coming up with a (technical) approach (to improving security) that we thought deserved a bearing " said Fleming, ooting that he has been unable to continue the attention of anyone in government for the past year. "We didn't understand that Ithe money | should have first been directed to a lobbying effort But the vendor lobby is playing a risky game, said Alan Paller, director of research at the SANS Institute in Bethesda, Md., who supports security benchmarks and public reporting, "Eventually, Congress is going to realize that inchestry is telling them one thing in the hearings and another thing privately," he said.

Consequently, security is unlikely to improve anytime soon, said Keith Morgan, chief of information security at Teradoc Communications Group LLC in Nitro, W/a. "Ultimater and the security of the security with t

# EMC Taps Database Archiving Tool For Its Information Life-cycle Suite

OuterBay deal gives users software for migrating old data

BY LUCAS MEARIAN
In a bid to shore up a key
piece of its information lifecycle management (ILM)
strategy, EMC Corp. rodsy will
announce a software partnership aimed at letting IT managers reduce the size of databases by moving old data to

other storage devices.
"I think it fills a bole in our ILM strategy, and it's one of the few holes we have left," said Mark Sorenson, EMC's senior vice president of information access and recovery software. He added that the Hopkinton, Mass-based storage vendor plans to introduce

in next year's first quarter.
Earlier this year, EMC
agreed to buy both Legato
Software Inc. and Documentum Inc. as part of its effort to
cobble together an integrated
set of tools for managing the
cotine life cycle of data. But
Soremson said EMC will rely
on third-party renders such as
Outer/Bay Technologies Inc. in
Campbell, Calif., to sell users.

database archiving software.
OuterBay's LiveArchive tool
on identify inactive information in databases and relocate
the data within the same disk
array or move it to less-expensive storage, based on poblicies
set by users. Alzhough the
agreement being announced
today inn't mutually exclusive.
EMC said OuterBay will be its

"preferred vendor" for database archiving software. LiveArchive is being integrated with EMC's Control-Center storage management tools as part of the deal, the two companies said.

Lois Hughes, senior manager of business applications systems at Tektronix Inc., said the Beaverton, Ore-based maker of test and messurement equipment was one of the first users to install Live-Archive when it was released lass year. Tektronix has osed lass year.

the archiving software to reduce the size of an Oracle transaction-processing database by 50% and has reaped a 42% increase in I/O performance as a result, she said. LiveArchive uses data age policies set by Tekroni's IT staff to purge old transactions from the Oracle database, which runs on a Sun Solaris server. The software then adds the historical records to a copy of the production environment that's stored in a sen-

copy of the production environment that's stored in a separate database for audit and reporting uses, Hughes said. "The beauty of it is that it maintains your transaction in-

tegrity, and there's no user training needed because your archive environment looks exactly like your production en-

stand the pieces they need and that they are working to incoporate this into their design," DiCeero usid. In a related matter, Dell Inc.'s top storage executive said during a conference call with EMC officials that the

vironment," she said.

Carolen DiCenzo, an analysi

at Gartner Inc., said the Outer-

Bay deal won't turn FMC into

an ILM software and services

vendor overnight. But it shows

that FMC executives "under-

with EMC officials that the
two companies likely will look
into bundling their hardware
and software products to create packaged ILM offerings.
"We believe ILM is the way
customers want to go," said
Darren Thomas, Dell's general

Darren I Bomas, Delt's gener, manager of storage, Dell'resells EMC's Clariion line of midrange disk arrays under a 2-year-old deal that has produced more than 7,000 installations thus far, according to the two companies. 64 5385 Eliminate boundaries and you shall e opportunity. At Nortal Networks, we transform networks. Re productivity and growth. Making your business a more profitable place, nortel networks.com

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#### MARYERAN IOHNSON

# Satisfying Supergeeks

ID YOU REALIZE," my daughter asked me one day, "that Dad has about 20 computer keyboards in the basement? What's up with that?"

Great question, I thought. Too had I'll never get a straight answer. To my eternal chagrin, I've found that direct inquiries about technology purchases at

my house always seem to end up in dead-end conversations about how much I spend on shoes Those of us who dwell in the Kingdom of the Superseck eventually learn to quit askine things like. "What was in that big box from eBay?" ("Uh. nothing for you. Are those new shoes?")

What some of us never learn, alas, is bow to stop searching for that perfect holiday gift for the supertechie who has everything (well, as far as we can tell, anyway). That's why I give thanks each year for this yery issue. wherein we publish our "Cool Stuff" feature (on page 23, and online at OuickLink 42520). Technology writer Russell Kay does an nutto the national time service out of standing job of sorting through this season's lineup of gadgets and gizmos for gift-giving. I may just have to how Ross a Duct-Tage Wallet (\$10) to \$30 at www.ducti.com) to show

But rather than stumble down the wrong path to the ideal geek gift. I decided to test-market some of our choices with my No. I superpeck A focus group of one, as it were. We started with the Duct-Tape Wallet, which got an immediate ranking of "outstanding!" The only drawback, he added, was that "you can make your own for about 30 cents." Not an unexpected observa tion from a man whose current wailet is a sturdy rubber band holding his cash and credit cards together in a lump.

So how shout the in Digital Pen and Paner from Logitech (\$199 at www.logitech.com)? Sport of deriging \*For

\$200. I'll hire someone to take my notes for me" Moving on, Would a USB watch appeal? (These start at \$80 and are made by multiple manufacturers.) Supergeek looked them over and took a pass.

concluding as our reviewer did that they're nothing special even with the Universal Serial Bus cable, "If you're connecting to a computer anyway, why doesn't it set the time with NTP? Or pick up the WWV radio signals?" he demanded, referring to the Network Time Protocol and

Boulder, Cnln. (I pretended the mestion was rhemrical ) One oddhall selection that held

fasteners for securing cell phones. pagers and other road-warrior sear to belt clins shoulder strong or dashboards (starting at \$20. at www.madwired.com). "I could see using that for all kind of things," he ister (Note to self I could live to regret this nne ) But the truly biggest bit of all was

the CarChio (starting at \$130 at www.davisnet.com). This plue-in munitoring device for a car's diagnostic port "may be the ultimate Bio Brother device with which to torment your teenager," our reviewer writes, since it can record trip details, including speed and start and stop times. "I wish I knew more about how to back the car" Super-

geek said dreamily. By the time we wrapped up our Cool Stuff tour, I had all the vital shopping data I needed. All that's left to do now is log no, point, click and wait for delivery

I'll just have to hope that Sopergook doesn't already have 19 in the basement. O 43121

surprising appeal was Rivet, a line of mused, sounding somehow a bit sin-

painted by Novell, is clear. The move is a sixual that NetWare does have a path in the Limix platform. Novell's pur chose in Assess of Roston-based Yimi. an points in the same direction. Novell and Ximian are now working on a way for Microsoft .Net applications to run on Linux. Unix and Windows and no developing a Linux desktop. And, ves. this is a real challenge to Red Hat, the leading Linux distributor. Aside from this emphasis on Linux

a \$50 million infusion from IBM endorses Mountly releases As Fart Perkins a Meta Group analyst. said, "This means Novell's got a dog in the bont But what kind of hunt is it?

As a rule IT year dor takeovers aren't easy wins unless

you're looking at big reductions in head count, injey customer order books or expansion into revenue-generating areas such as consulting services. Those don't seem to be in this deal. Another aspect I find troubling is simple geography. This deal spans multiple time zones and aims to integrate different cultures, mirroring the situation in the misfiring DaimlerChrysler merger, which seems to have benefited only airlines flying between Detroit and Stuttgart. Linux offers a great IT model for users, but the business model for vendors is unclear. Red Hat made just



"I'M LOOKING FOR A GADGET THAT TELLS ME WHICH OF THESE OTHER GADGETS ARE (RAP.

DIMM FOY

# Novell + SUSE = **Problems**

ONVENTIONAL wisdom about IT vendor takeovers is completely missing in Novell's \$210 million cash deal to purchase SUSE Linux. That makes me uneasy. The bright side of the picture, as

\$5 million on sales of \$106 million last year, SUSE is privately held, so figures aren't available, but if Novell is after Linux credibility, why not assemble a team of Linux developers to port Net-Ware's administration and management features to the open-source operating system?

If this is a plan to nab support from customers frustrated with Microsoft's licensing policies, great - but that isn't a business strategy. While this takeover is the work of new executive blood at Novell eiddy with new cash in the bank it faces the same bazards as previous Novell takeovers such as Univ System I shorstories / Inivities Indeed, this could be one of those deals that's mod for the customer good for the technology, but had for the acquiring company, which fails to see the expected money flow in.

A purchase of Red Hat would have ioned Novell as the leader in Linux and generated the kind of excite ment that leads to real shifts in market value. As it is, SUSE makes out well (it's getting more than \$500,000 per employee) and Novell buys some

The next couple of years will determine whether this is a visionary or stopeso move. In the meantime the real moneymaker will be the airline that flies the Salt Lake City-to-Nuremberr mute. O 43073

global trends continue. On this the evidence is worri-

The recklessness of cur-

rent fiscal policy is astounding. President Bush and the Republican controlled Congress, aided by some Democrats who would have to hire a detective agency to locate their spines, have brought back the era of massive budget deficits. The red ink isn't all their doing but

they're making the situation vastly, dangerously worse The Federal Reserve's low-interestrate policies, which were needed to

prevent a real disaster after the implesion of the tech bubble, have become dangerous in their own right. They've encouraged the continuing inflation of a housing bubble that, when it bursts. will reverberate much more widely in the overall economy than did the Nas-

Speaking of the stock market, why are so many tech companies selling at



such high multiples again? Now, eBay is a beck of a franchise, but even after a recent correction it was still selline at 87 times carnings in mid-November. Takes your breath away Meanwhile, investors per

that Wall Street keeps rigging the markets against the little guy on behalf of the insiders. Under Democrucic and Republican administrations in the case

two decades, shafting the small investor has not just gone unpunished. it's been policy. And one of these days. what's left of trust in the system will evaporate entirely unless true capitalists stand up to save capitalism

IT departments have another rendency to ponder: the rapid decamping of jobs away from the U.S. The socalled iobless recovery has been nothing of the sort; it's just that the new jobs are mostly in India, China and other places that offer component

READERS' LETTERS

America a better deal. The financial reasons for this transition are notable but as we move jobs that require skilled labor to other nations, we may well be undermining our own figure Many of Wal-Mart's employees qualify for government assistance. Is that the kind of American workforce we went

The best news for IT in all this is the equally compelling need for companies and governments to make better use of the resources they have. Sometimes, waiting is the best policy, especially when we know we can catch up quickly: first movers don't always hold the right cards. But we can also wait too lone

I wish I had more confidence that our economy will support what's needed in the long run. We're borrowing against our future, and I'm not sun how we're enine pay this debr O 43071

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## DAN GILLMOR IT Economy: Half-Empty, And Leaking

O THE ECONOMY is finally improving. But is this the real thing - a significant, long-lasting recovery - or just a false dawn? For IT, the answer to that question

The enormous tax cuts have begun to make a difference. So has a hier boost in government spending, notably on military and domestic homeland security programs. Meanwhile, productivity is improving dramatically. It all adds up to an economy that, for now, is making real strides forward.

Tech spending seems to be rebounding a bit. Cisco Systems' most recent ers, showing stellar improvement in earnings, suggest that the worst may be over. Whether there's significant pent-up demand for IT spending (other than IT staff) is another matter; the evidence simply isn't

compelling on this point. What is compelling is the econom danger we face if the U.S. government's fiscal gambles fail, and if some

# Future of Analysts THE COLUMN "Businessy IT" [QuickLink 42467] is compl

nonsense Analysis are a recognit ing link between business and technology, and they grow on technology soll. Eliminating all technology jobs will quickly eliminate all anavets. We can see what outsourning already has done; I don't know one high actional countries who places to curse better education in con-

rammų. Audimir Gendler

Huntington Beach, Calif.

## **Bounty Hunt**

A COMMONE to your heading.
\*Experts, IT Managers Say Mi-croselt Should Forget Bounty, Focus on Security" (QuickLink 42619]. Well, experts and IT managers are wrong. Microsoft has the money to do both, and it should. Senior technology director,

SEEMS that no one is recalling hat many of the exploits being

used by the virus writers are norms. that have been added to Microsoft's

#### on treatment travers in properties hance interoperability. Many of the exploits are not bugs, but features of the product that allow programmers, such as myself, to orogrammetically control Office acce, and the operating system.

Alex Buttery Mount Laurel, N.J. HIS BOUNTY IS a public rela This source to divert attention from the real problem: Microsoft doesn't test and analyze its code well enough before it sends it out

the door Mike Echlin

Analyst, Deep River, Ontario

#### "It's the GUL Stunid!" F MOVELL has any chance. this is it l'Linux Infusion Gives Novell a ided Boost," QuickLink 426771 The Linux kernel should give it the

strong application server that it has But Novell still needs to post a banner in its developers' quarters saying, "It's the GUL stupid" Every

Novell technical class I've taken has had Windows network admins nersent who presse NerWare's carobiities, but whine like stuck pigs about the interface

#### We're a typical Tast-gasp Novel" small business that ultimately has to go where our ERP vendor goes. Microsoft successful ly stalked this territory with SQI Server, and Novell has to wen back the ERP vendors before it loses the

liken of un - miartantly but for good. Vice president, MIS, Kinamed

Inc. Comerille. Calif.

**Getting Alignment** As a community working with Fortune 500 companies to quantity the costs and benefits of IT

ons. I have found that there are a few areas where a gap between IT and business almost always exists ["Corporate Execs Try New Ways to Align IT With Business Units." QuckLink 42353)

The IT executives don't have the financial skills to quantily the financials surrounding the IT project, especially on the benefits side.

The business isoders don't have the technical skills to trust that

the benefits really exist. The one thing that can bridge this gag is truly objective analy of the remont's creet and bunufits but most organizations have a

hard time dono that applyas. The hardest cort is understo ing that IT is responsible only for implementation and maintenance The business side must be taxed with changes in process, culture

and utilization if any benefits are to If the change process takes too

long, the outlined benefits can erode quickly Benefits don't start accurredation until the whole change cycle has taken place, and many projects can become obso late before break-even is reached

Keyle Kraft Director of sales/sales development, Excipio Complian IIC Minnesonalis kkraftikescipio.net

COMPUTERWORLD welcomes comments from its readers. Letters will be edited for brevity and closity. They should be addressed to James Ecide, letters editor, Computerworld, PO Box 9171, 500 Old Connecticut Path. Fravingham, Mass. 01701 Fey (506) 820-4643 E-mail letters/incorrectorworld.com

Include an address and phone number for immediate verification.

For more letters on these and other legion, go to

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# "NOW EVE EXECUTIVE CAN-BACK U

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NPIBALAN, 5 automatically protects personal -1\_0 monant. Each effort.
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## QUICKSTUDY

The 802.16 wireless metropolitan-area network standard that's under development, widely referred to as WiMax, is aimed at making broadband network access available without the expense of stringing wires or the limitations of DSL Page 34



### SECURITY MANAGER'S JOURNAL Bad Policy Makes For Weak Passwords

Unclear policies and sloppy security practices allow too many weak passwords to lineer at Vince Tuesday's company. Page 38

QUOTE OF THE WEEK

It occurred to me that soft-ware with the intelligence of a nouse or a monkey would have the rightening capacity to launch a new form of network-based warfare. Paul A. Strassmann, columnist, page 41

# Super-Geek Specials

Grand Canyon Display Series + MANUFACTURER: Liebennann Inc., Los Angeles WEB SITE: www.go-L.com PRICE: Starting at \$8,500

Except in a hot dance club or a humongous trade show exhibst, the most spectacular monitors you're ever likely to see are the Grand Carryon Displays. These ultrawide scenere deliver resolutions up to 25 times better than VGA (6,400 by 1,200 pixels), with wide viewing angles, fast video response, excellent color fidelity and red-green-blue auto-geometry-sensing color correction. Available in 76-81- and 92-in. sizes, with price tags to match: \$8,500. \$12,500 and \$17,500, respectively.

Continued on page 24



Perhaps it's a sign of a revitalized econ-omy. There are gadgets and gizmos aplenty for geeks of all ages on your gift list. By Russell Kay

Stuff

Continued from page 23

io Digital Pen +

MERCTIREP Louisching Francet Cult WER SITE: www locatech com MED GITE Lots of computer users still want to write or take notes

with pen and paper. You may remember from a few wars ann the ConsePert which tred to contain our potance in computer-readable form, or the less thansuccessful IBM TransNote laptop/pad hybrid. And current tablet PCs don't out it for users who don't like the feel of writing on glass. Lootech offers an alternative: an electronic pen - a very large one - called the io Digital Pen and Paper. For \$199, you can take and store up to 40 pages of notes, drawmas and more and download them to your PC, where you can invoke handwriting recognition to hopefully turn your scribbling into editable text. One catch. You must use specially formatted paper, which is available in the form

of pads, notebooks, graph paper and vellow Post-t notes. The Duct-Tape Wallet «

NUFACTURER: Duch Monument Colo WEB SITE: www.ducti.com

HCE: \$10-\$30 Duct toon is the ultimate in low tech - which gives it, paradoxically, a let of high-tech appeal. Duct makes wallets and checkbooks from specially engineered duct tape that won't left, peel apart, get sticky or crud up with lint from your pocket or purse. According to reseller

ThinkGook.com, "These durable and well-constructed duct tape wallets are great for all programmers, but Perl coders might enjoy them the most

Ambient Orb

MANUFACTURER: Ambient Devices Inc., Cambridge, Mass WEB SITE: www.ambentdevices.com DESCRIPTION It doesn't mally rin anything but it's conceals compelling The Ambient Orb is a lighted sphere of frosted glass that slowly changes

among thousands of colors to reflect variance of the weather, the state of the stock market, whether your boss is online or other conditions. You plus the Orb into a 110-volt outlet, and it's automatically up and running

the Internet is required. You can select your Orb's channel via a Web interface, and it will be updated requirity, perhaps as often as every few menutes. Out of the box, the Orb reflects the Dow Jones Indes, glowing green to indicate prices up, and when they're down, wellow when things are calm. If there is a change of more than 1,5%, the Orb outsates. Some weather and stock moorts are line, and others are available at entra cost. A developer interface lets Web programmers control the color of their Orbs with a simple HTTP "get" call

on a nationaide assisse returnir - no connection to a PC or

USB Watches + MANUFACTURERS: Laks Wetch Co., Vienna Perpheral Enhancements Corp., Ada, Okla.

WFB SITES: www.laks.com www.penpheral.com DONCE: Shed at \$80 Pull out the Universal Serial Rest rable at-

tached to your wristwatch strap, plug it into your computer and watch people's even but cut. Actualiv. it's kest a normal quartz-movement worch with one extra - a built-in flash memory chip, available in models that hold up to 256MB. The memory works fine and the stowoway LISR cable is handy but as a watch, it's nothing onecal - It only tells time. An included USB extension cable makes it a little easser to connect to your commuter without unbuckling the stop or risking

Aura Workstation MANUFACTURER: Poetic Technologies, Montreal

carnal transal peoblems

WEB SITE: www.poetictoch.com PRICE: Approximately \$5,000 If money's no object, and you went to spend the most and highest-qual time with your computer, look into the Aura workstation from Postic Technologies. This aff-in-one workplace environment is essentially self-contained

with respect to lighting, air circulation, heating (optional) and power distribution. The sent can be adjusted in seven ways, and all work and senting surfaces can be moved. Aura can handle up to four monitors. The entire unit robites automolically, if desired to help prowide the best views or lollow changes in natural lighting.

Music to My Ears

Dell's DJ Digital Jukebox 4

FACTURER: Dell in-WEB SITE: www.del/4me.com PRICE: Starts at \$249 The best competitor set to Ar Computer Inc.'s (Pod. Dell's new Digital Julesbox cornes with a 1569 or 2069 hand drive and a battery good

for 16 hours of MP3 or Windows Media Audio itstening. The interface inn't as. nice as iPod's, but at \$249 or \$299, I's much

cheaper, and its glowing blue diel and bu look cool in the dark. Taking another cue 99-cents-per-song download service

igitalMovie, Ital Vinyl CD-R + gifted Withyr Committee Corp., Charlotte, N.C.

WEB SITE: www.vorbalm.com RICE: S4 for DVD blanks, S13 for 10-pack of CD-R If you're like me, you're burning a lot of COs these days. whether for backup or for music compilations. And if you like to fool with home video, you're probably storing your movies on DVDs so you can watch them on your television. Verbatim has some new products for us all: blank CD-R disks that look idea 45-spm records (remembur records?) and CD-Rs with blank labels that can be printed on by ink-jet nters, as well as blank DVD+Rs that look like film reels. DigitalMovie DVD

10-cack.

inks run about \$12 for a three-pack, while Digital Wind CD-Rs are \$13 per Nero 6 Ultra Edition WACTURER: Alward Software Inc., Glendale, Calif.

WEB SITE: www.nero.com PRICE: \$99 (or \$69 via download) I've used Ahead Softwere's Nero Burning ROW softwere to burn CDs for years. The newest retease. Neen 6 Utra Edition, has expanded and integrated capabilities,

Continued on page 25

# Stuff

Continued from page 24 making if rurser and marker than over to create or conv. music discs, photos, data backups and new DVDs. This all in one solution includes applications to edit autio and order mix multiple audio tracks like professionals watch VCD, SVCD and DVD moves, listen to music, deson covers, and gotimor your drive's performance

#### Radio YourWay + MANUFACTURER Profes Products Inc. Brea Calif.

WEB SITE: www.pogograducts.com PRICE: \$150 or \$200, depending on memory capacity For decades, we've been able to set up video moneters to turn on at preset times and record programs for us automatically. But until now, there has been no moduct that does the same for radio, even though it's a much simpler process. Radio YourWay is a small MP3 player containing an AMFM radio with a programmable solidstate recorder. The unit holds up to 4.5 hours of com-

pressed audin in its 30MB of internal memory and up to 36 hours with add-in Secure Digital memory cards. With the included USB cable, you can transfer tiles to and from your PC and store MP3 files to Radio YourWay, Did I mention that it also has a voice recorder?

#### SA100 Mini-MP3

MANUFACTURER: Aun Technologies, St. Charles, Mo. MED SITE ...... PRICE Starts at \$50

It looks like a USB thumb drive, but it also plays MP3 audo. The SA100 is about the size of a thumb 35 in, by 11 in and set () Q in thirty Australia in GAMR 126MR and 256MB versions, the portable digital audio device runs on one AAA hattery for up to six hours of music playback. It includes two LED indicators and an equalizer that can be presed to five settings, its firmware is unpraciable via a ISS nort



Evilim FY-7411 MANUFACTURER: Caso Inc., Dover, N.J.

WEB SITE: http://exilim.casio.com PRICE: Under \$400

Casin's Evilan FX-7411 is one of the smallest digital namesas on the morket but it's loaded with features. The size of a credit card and under 1 in, thick, with 4-mensored merchation, this camera fits into a docking station so that, sensibly, the LED viewscreen, not the lens, faces you. The

EX-Z4U has a 3X zoom lens and sells for under \$400, with dock. Best of all, there's just a 0.1-sec, lag time after you press the shut for until it takes the picture - far faster than most digital cameras.

DVD Movie Writer DC3000 + MESACTIMER Houses Parked WIR SITE: www.shooping.ho.com PRICE: \$339

When it's time to edit your vacation movies and put them on DVD, you might want to use Hewlett-Packard's new DVD Movie Writer DC3000, This external DVD writer has a built-in log capture card that lets you easily transfer home videos directly from tape to a digital format. The unit comes with a full suite of software to enable video editing along with photo, music and data profit afters, and if left you write and mod CD-R CD-RW and DWD-RV-RW data.

The Photosmart 945 is HP's become and host digital camera to date offerior 5.3-measured resolution with an BX cotical znom less. The cetional comers dock allows easy sharing of photos to computer or printers and inchanges the

Photosmart 945 × WINFACTURER: Hewlett-Packard Co WEB SITE: www.shopping.hp.com

PRICE: SSSO







How to carry that slick new cell phone? Cases are so last year. What you want is Rivet, a line of in hangeable fasteners developed in Australia. The modular system can be used as a belt olio or a and mount or attached to a shoulder strap. All components are stackined out of aircraft air minum and stainless steel. You attach a steel pin to your phone or camera with high-strength adh sive, then clip it into the Rivet e-Clip a spring-loaded top entry gate. To release, push a button. The Micro Clip i intended to be as much fashion accessory as carrying solution - is a tiny, builty shaped conside with a stidion cover that accords the same nice and attaches to a chair.

Treo 600 + tain View, Calf.

PRICE: \$500 With its sleek styling, decent thumb key

board, well-thought-out dialing softwere built in digital camera, improved Web bro er and bright screen. Handspring's newest smart phone/PDA combo is likely to be the No. 1 item on many people's lists this year. The Topo 600 uses the latest version of Polm OS. And though only slightly smaller than its pre-

decessor. It's ensier to store. Continued on page 28



THEORY OF THE

# Sed committee opports as its earl See proceed counts as using



It's not like anything you've ever seen in the workplace. In this case, the words "radically simplifying the way you work" a "ctually apply. It starts with the nather obvious – but generally ignored – notion that your business unique. Enter the Canon imageRUNNER\* with something totally unheard of – customization. By that, we mean you can have applications created for imageRUNNER that meet the unique needs of your business. After all, until now, machines



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of your business' unique needs. Of course, we're
merely scratching the surface. The possibilities
are as vad as the businesse ericities that lie





With the Canon imageRUNNER, you can have customized applications that meet the unique needs of your business.

before you. And remember, you're eliminating time-consuming steps from the workflow process, making it simple and efficient. All of which makes using imageRUNNER extremely cost-effective. In short, we've seen the future and it's called the customizable Canon imageRUNNER, You're invited to see it too. That is, if you're ready to stood oding business as usual.

www.imagerunner.com 1-800-OK-CANON



Stuff

Continued from page 25

# Updating Your Home Office

## IGo Desk +

WER SITE: www.upoferac.com

PRICE: \$500 (sitting), \$600 (standing) If you're a Macintosh aficionado, you're lively superconscious about style esses. Here's the IGo, a desk that complements the futurests styling of your Mac. Rem. Describes constact this word-comic work assumption to two besubts - new five



KidzMouse + MANUFACTURER: KidzMouse Inc., San Malvo, Celd

use while you're sitting, and another for standing. WEB SITE: www.lodamouse.com PRICE: \$21 (ball). \$26 (optical) Krt/Mouse makes a line of child-friendly mice that come

in colorful character designs, including some licensed from Disney, Nickelodeon and Sesame Street Desanned by a grandmother for her 4-year-old granddaughter, this mouse is half the size of a conventional computer mouse, with a rounded shape that lits growing hands, Instead of the traditional mouse huttons: the KirtzMouse has a squaezable "hear" that review the fixed there

Mirra Chair «

comfortable alternative to a normal mouse NUFACTURER: Herman Miller Inc., Zeeland, Mich. WEB SITE: www.hermanmiller.com

PRICE: Starts at \$519

You need a good chair for working at your computer. Your acting back will thank you for it. But you can't afford to remortgage the house to pay for it. Take a look at (and a seat in) the new awardwriting Mirra from Herman Miller. The chair is designed in Germany to be ergonomically adaptable and provide support where you need it.

of the device, if you're a grown-up with small hands, you ment find this a











UX50 Personal Entertainment Communicate MANUFACTURER Sony Flortmours e-Solution Co. Woodchill Lake, N.J.

WEB SITE: www.somestyle.com PRICE- \$700

The UX50 Personal Entertainment Communicator is a handheld down with afterburners, it features a 480-by-320-pixel landscape-mode display in a clamshell case, built in Wi-Fi and Bluetooth, a built-in VGA digital carmers and the Palm OS 5 cocrating system. What else? An MP3 player, a voice recorder, a video recorder and Memory Stick Pro cards for add-on storage. The display swivels and folds down, and you can use it in touch-som The wide-screen design provides more room for the keyboard.





FlashFolio + MANUFACTURER: RoadWard WEB SITE: www.roadwired.com

PRICE: \$30; \$60 in leather vable storage devices used to be a nuisance because they were so big. Now they're a muisonor

Continued on page 32

Faster than Verizon Faster than Sprint PCS. Faster than Cingular. Faster than T-Mobile Faster than Nextel.



#### For the fastest way to open large e-mail attachments on a national wireless network, switch to AT&T Wireless

It's a fact. No one offers a faster national wireless data network than AT&T Wireless with EDGE technology. No one. With average speeds of 100-130 Kbps, bursts of up to 200 Kbps and secure wireless access, you can browse the internet as well as download presentations, documents and spreadsheets nearly twice as fast as with any other national wireless data network. We work with leading iT companies to help you get more out of the technology you use every day, across the U.S. High-speed national wireless data is here. And no one is faster at it than AT&T Wireless. Call 1 888-DATA-288 or go to attwireless.com/speed



I Faster data speeds from mon



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Designs:
Power efficiency
allows for smaller
cooling systems
and lighter
notebooks.

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High
Performance:
Extremely
responsive to the
most demanding
business
applications.

Longer Battery Life: Power-conserving technology enables extended battery life.







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intel.

# Stuff

More Cool Stuff

ent books of 2003, go to:

at our Who sile

QuickLink 43102

w technology can be

Continued from page 28 because they're so small. With new formats proliferating, thumb-

neri-size cards offenne up to KiB of storage and burd divines herdly brozer than postage stamps, it's all too easy to lose these devices or take the wrong one with you. RoadWind's FlashFolin comes to the rescue. It has 20 pocketed compartments (all with Veloro fasteners), plus an index card. This case uses Lucent Technologies Inc.'s patented polymer Corrosion Intercept tech ordinary which macts with and predraines common process that can tarnish metals and degrade or damage electronics.

#### GME224M32 Wireless Mini Mouse +

MANUFACTURER: Donor Inc. Josep Cold WEB SITE: www.iogsar.com

PRICE SSO You can stire down your toned lot a little with Kinear's new wereless optical minimouse, a peripheral that stores 32MB of data in its built-in flash memory. With 800-dra resolution, this mouse mquires less wrist movement than most, an advantage for travelers working on artime tray tables. A retractable cable, an onleft switch and a carrying case simplify storage and eliminate tangled



FACTURER: Kensungton Technology Group, San Mates, Calif. WEB SITE: www.kensington.com

POICE- \$20 You know what it's like on those hall-to-caractly cross-county Birdon when the plane's air conditioning isn't up to the job. Now you can do something about it. Kensunston's FlyFag will styr up some coult for you. It's a small personal fan that plugs into your lapton's USB port. List price is \$20, but you can often find it under \$10.



WEB SITE: www.lapworksanc.com PRICE: \$50

Sometimes, like when you're in an arport terminal, you'd like just a little bit of hard surface to put your laptop on, Here's a portable unit that fits that belneatly, with an ergonomic "desk" that sets at several angles, an add-on mouse god and a swivel base. And when your flight is called, you can fold it up quickly and slow it in your bnelgase.

# Palm Tungsten T3 (shown with Accessory Keyboard) + MANUFACTURER: Pain Inc., Micros, Calf.

WEB SITE: www.palmone.com

PRICE: \$400 The best-ever Palm handheld leatures a brilliant high-resolution display excondable to 480 by 320 pools and viewable in landscape or portrait mode The T3 has a built-in voice recorder and MP3 player, plus a photo and video





#### Cyber Tool 41

MANUFACTURER: Victorinos WER SITE: http://www.sussessmu.com/universes/com/universes motort gi-15896category-39

PRICE: \$95 From Victorings, maker of the Swiss Army Keele, the \$95 Cyber Tool 41 is a 41-function pocket knife that includes a DIP switch setter and a set of Torx and PosiDrive bits along with the more traditional scissors, silens. conference and can concer

#### Protection

Armor 3600 × MANUFACTURER: Other Products LLC. Fort Collins, Colo. WER SITE: www.offerbas.com

PRICE: \$100 If you're going to be carrying your handheld device in swamps, war zones or other

places that aren't friendly to consumer electronic devices, consider the Armor 3600 numerized waterment care This accessory fits most handhelds, allowing hill use of the touch access vis a roomsed, clear plastic membrane. It also features waterproof cable connections for enternal accessories, an outside styles helder and an adjustable hand strap that's easy to use with gloves on.

MUFACTURER: Davis Instruments Corp., Harword, Calif. WEB SITE: www.dowsnet.com PRICE: Starts at \$130

This may be the ultimate Big Brother device with which to terment your tennager. CarChip is a device the sare of a 9-volt bettery that plugs into your (1996 or later) can's diagnostic port, which records data whenever the can is started. CarChip automatically records trip details, including speed, start and stop times, and distance traveled. You can unplug CarChip and uploed its information to a PC. In addition, CarChip can create an accident log. which documents the 20 seconds before an accident, O 42520

Kay is a Computerworld contributing writer in Worcester, Mass. You can reach him at russkay@charter.net.



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# WiMax

ZOTTALLIC

WiMax is the popular name of the 802.16 wireless metropolitan-area network standard that's currently being developed. WiMax, which will have a range of up to allies, is primarily aimed at making broadband network access widely available without the expense of stringing wires (as in cable-access broadband) or the distance limitations of Divital Subsective I ine.

STRUBELL, NAY

M.T. THE TURN of the millennium, wireless networks have
peroliferated. W-Fit, the popular
term for the capabilities created
by a group of standards from the firsttion of Beetrical and Ficerronics Englantor offices and many pulle place,
with our laptops and handhelds, yet
with our laptops and handhelds. Yet
till have instant, unencumbered access to our companies' intranets and
the Internet.

Wilhax (Worldwide Interoperability
Wilhax (Worldwide Interoperability
for Microwave Access) is the
next step on the road to a
wireless world, extending
broad/bund wireless access to
new locations and over longer
distances, as well as significantly reducing the cust of
bringing broad/bund to new areas.

oringing oronatoma to new areas. Among the permittees of WiMax is that it could offer the solution to what's sometimes called the "last-mile" problem, referring to the expense and time needed to connect in-dividual homes and offices to trunk lines for communications. WiMax promites a wireless access range of up to 31 miles, compared with Wi-Fi's 300 feet and fills extendible.

#### 902 What?

BUZ. WMAI?
The popularity of wireless networking has grown very quickly because of effective standardization. Wi-Fi encompasses a family of specifications within the IEEE 802.II standard [QuickLink 2722]. These include 802.IIb (the most popular, at IMbluseec, with a

typical range of up to 300 feet), 802.IIa (54Mbit/sec, but at a shorter range than 802.IIb) and 802.IIg (combining the speed of "a" with the range of "b"). WiMax is the new shorthand term for IEEE Standard 802(ib, slos known as "Air Interface for Fixed Broadband With the short and the short and

as "Air Interface for Fixed Broadband Wireless Access Systems." It's been designed from the beginning to be compatible with European standards something that didn't happen with 802.Ila and delayed its adoption. The monprofit WiMax Forum was

established in 2001 by Nedon Corp., Ensemble Communications Inc. and the Orthogonal Frequency Division Multiplexing Forum. The WiMax Forum aims to

support wireless metropolitanarea networking products based on 802.16, much as the Wi-Fi Alliance has done for wireless

LANs and 802.ll.
The organization has most recently been working on standards certification and interoperability testing. In 2003, Intel Corp. became a major supports of the WMAN. Entero.

tion and interoperability testing. In 2003, Intel Corp. became a major supporter of the WiMax Forum. The initial version of the 802.16 standard, approved by the New York-based IEEE in 2002, operates in the 10-to-66-

GHz frequency band and requires lineof-sight towers. The 8024to extension, ratified in March 2003, doesn't require line-ofsight transmission and allows use of lower frequencies (2 to II GHz), many of which are unregulated. It boosts a 35-mile range and 70Mbit/sec, data transfer rates that can support thousmals of users. Vendors have held interoperability forums, and the first commercial products are expected to appear on the

Market next year.
Additional 802.16 standards are in
the works, here's what they'll cover:

he works, here's what they'll cover: **802.166** — Quality of service **802.16c** — Interoperability, with pro-

tocols and test-suite structures 802.16d — Fixing things not covered by 802.11c, which is the standard for developing access points

802.16e — Support for mobile as well as fixed broadband

## Technology Considerations The overall concept of metropolitanarra wireless networking as anyl-

siened with 80216, beginn with what's called fired wilesless. Here, a beddoor of base visations is connected to a public incrework, and each bose station upports hundreds of fixed subscriber stations, which can be bed public Wei? "hat sports' and firevalled enterprise networks. The best stations would use the Media Access Control layer defined in the standard — a common interface that makes the networks interoperable — and would allocate uplied in the standard and a common interface that makes the networks interoperable — and would allocate uplied and the state of the st

Later in the development cycle, with 802.16e. WiMax is expected to support mobile wireless technology — that is, wireless transmissions directly to mobile end users. This will be similar in function to the General Packet Radio Service and the 'one times' radio transmission technology (IxRTT) offered by phone companies.

Intel has now promised WiMax versions of its Centrino chip set for 2004, whereas Nokia says it will have battery and other technical issues solved in time to launch a WiMax cell phone in 2005.

Following on the heels of WiMax is

U.S. AND EUROPEAN WIRELESS NETWORKIN STANDARDS

wat			
104	ETSI HIPERMAN HIPERACCESS		
LAN			
PAR	ETSTHIPERPAN		
	TANK TO SERVICE THE SERVICE TH		

#### GLOSSARV If European Teles Standards Institute

Radio Metropolitan-Area Net

Personal-Arno Network
High Performa-

Project

Enhanced data rate

GSM evolution

another standard, IEEE 802,20, which addresses wide-area wireless networks and is currently under development; no products supporting 802,20 are expected before 2006.

#### The Promise The Washington-based Cellular Tele-

communications & Internet Association reports that in 2000, there were upwards of 109 million cellular subscribers — compared with 88 million residential where telephone times (are consider that part of the telecommunications industry to be an indicator of what's to come in data networking, it's likely that in a few years, much of the laternet's traffic will be carried over the air via Wilday, and its descendants. Visual Strategier Inc., a market re-Visual Strategier Inc., a market re-

search firm in Kings Park, N.Y., predicts that Wildax product sales will reach 51 billion by 2008. According to Oyster Bay, N.Y.-based ABI Research, the market for long-range wireless products based on 802.16 and the forthcoming 802.20 standard will reach 51.5 billion by 2008. 64 22899

Koy is a Computerworld contributing writer. You can reach him at russkay@charter.net.

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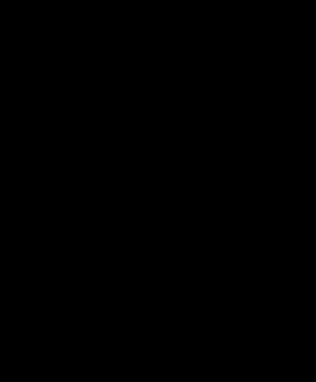
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# WiMax

#### DEFINITION

WiMax is the popular name of the 802.16 wireless metropolitan-area network standard that's currently being developed. WiMax, which will have a range of up to 31 miles, is primarily aimed at making broadband network access widely available without the expense of stringing wires (as in cable-access broadband) or the distance limitations of Digital Subscriber Line.

INCS THE TURN of the millennium, which is not problem. The true for the capabilities created by a group of standards from the Institute of Bectrical and Electronics Engineering of the capabilities created our offices and many public places our offices and many public places with our laptops and handheds, yet with our laptops and handheds yet with our laptops and handheds yet with group and places to our companies' intranects and the Internet.

WiMax (Worldwide Interoperability for Microwave Accesses is the mext step on the road to a wireless world, extending broadband wireless access to new locations and over Jonger distances, as well as significantly reducing the cost of bringing broadband to new areas.

bringing broadband to new areas.

Among the promises of WiMax is that it could offer the solution to what's sometimes called the "Lass-mile" problem, referring to the expense and time needed to connect individual bomes and offices to trunk lines for communications. WiMax promises a wineless access range of up to 31 miles, compared with Wi-Fr's 300 feer and Illustrooth's 30 feer.

#### ....

802.What?

The popularity of wireless networking has grown very quickly because of effective standardization. Wi-Fi encompasses a family of specifications within the IEEE 802.11 standard (QuickLink 27922). These include 802.11b (the most popular at III)Mbt/s/ec, with a

typical range of up to 300 feet). 802.IIa (54Mbid/sec., but at a shorter range than 802.IBb) and 802.IIg (combining the speed of "a" with the range of "b". WiMax is the new shorthand term for IEEE Standard 802.Ib, also known as "Air Interface for Fixed Broadband Wireless Access Systems." It's been designed from the beginning to be com-

signed from the beginning to be compatible with European standards something that didn't happen with 802. Ha and delayed its adoption. The nonprofit WilMax Forum was established in 2001 by Nokia Corp, Ensemble Communications Inc. and the Orthogonal Fromency

Division Multiplexing Forum.
The WiMax Forum aims to support wireless metropolitassarea networking products based oo \$02.16, much as the

area networking products based oo 802.16, much as the Wi-Fi Alliance has done for wireless LANs and 802.11. The organization has most recently

beeo working on standards certification and interoperability testing. In 2003, Insel Corp. became a major supporter of the Wildax Forum. The initial version of the 802.16 stan-

porter of the WiMax Forum.
The initial version of the 802.16 standard, approved by the New York-based IEEE in 2002, operates in the 10-to-66-GHz frequency band and requires line-of-sight towers.

of-sight towers.
The 802.16a extension, ratified in March 2003, doeso't require line-of-sight transmission and allows use of lower frequencies (2 to 11 GHz), many of which are unregulated. It boasts a 31-mile range and 70Mbit/Scc. data transfer rates that can support thousands of users.

Vendors have beld interoperability forums, and the first commercial products are expected to appear on the

Additional 802.16 standards are in the works; bere's what they'll cover:

he works; bere's what they'll cover: 802.186 — Quality of service 802.18c — Interoperability, with pro-

tocols and test-suite structures 802.86 — Fixing things not covered by 802.1k, which is the standard for developing access points 802.86 — Support for mobile as

802.16e — Support for mobil weil as fixed broadband

## Technology Considerations The overall concept of metropolitan-

stood with 802.16, begins with what? called fixed vireless. Here, a backbone of biase stations is connected to a public network, and each base station supports bundreds of fixed subscriber as the station supports bundreds of fixed subscriber as the station of the state of the

an essentially real-time basis.

Later in the development cycle, with 802.16e, Wilkax is expected to support mobile wireless technology — that is, wireless transmissions discretly to mobile end users. This will be similar in function to the General Packet Radio Service and the 'one times' radio transmission technology (LRTT) offered by obnor comannies.

fractional processing taxt 17 orfered by phone companies. Intel has now promised WiMax versions of its Centrino chip set for 2004, whereas Nokia says it will have battery and other technical issues solved in time to launch a WiMax ceil phone in 2005.

hone in 2005. Following on the heels of WiMax is

Ration 1

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another standard, IEEE 802.20, which addresses wide-area wireless networks and is currently under development; no products supporting 802.20 are expected before 2006.

#### The Promise

The Washington-based Ceilular Telecommunications & Internet Association reports that in 2000, there were upwards of 109 million cellular subscribers - compared with SS million residential wired telephone lines (sccording to U.S. government data). If we consider that part of the telecommunications industry to be an indicator of what's to come in data networking, it's likely that in a few years, much of the Internet's traffic will be carried over the air via WiMax and its descendants. not over copper wires or optical fiber. Visant Strategies Inc., a market research firm in Kings Park, N.Y., predicts that WiMax product sales will reach \$1 billion by 2008. According to Oyster Bay, N.Y.-based ABI Research. the market for long-range wireless products based on 802.16 and the forthcoming 802.20 standard will reach \$1.5 billion by 2008. O 42999

Koy is a Computerworld contributing writer. You can reach him of russkovillcharter.net.

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# **Bad Policy Makes** For Weak Passwords

Easily guessed passwords and sloppy security practices leave end-user accounts vulnerable to attackers in more ways than one, By Vince Tuesday

T'S INDENESSIONAL M break down and sob during a meeting, but I came pretty close a few times this week as I finally began to undererand the details of the IT security systems and processes my new company uses to

Em fairly new here so there's a lot I still don't know. But it SECURITY wasn't long before it became clear to me VANAGER'S that things are deeply wrong. It seems like every week. I uncover

layer upon layer of seemingly minor issues that undermine a lot of what we do. This week, it was passwords. The main problem is

that they're easily guessed and frequently shared. My security team continually tells users that they must nick strong posswords and not share them. But we've been unclear with users about what counts as a strong password because we've been unsure about it ourselves.

Most computer systems store a one-way encrypted password in a database. When you attempt to log in, they encrypt what you type and comname that to the stored value If both match, the system loss

you in. If an attacker can connect to a server, he can attempt to guess the password by just trying various words; password, secret and jamesbond ore favorites But If an attacker can steal the encrypted list or password file, he can launch a more insidious attack. Instead of connecting to the server a slow and sometimes detectable process - he can take a dictionary of common words and encrypt them using the same process as the server and store each in a lookup table. If an attacker wanted to

break into more than one onerating system, he'd need one table for Windows servers and three for the three main kinds of their Thou once held stolen the en-

crypted passwords. be could just look in the table and see which want each matched A backer launch. ing an online attack is likely to

make a few hundred guesses before he's spotted or moves on But an off-line attack can cover hundreds of thousands of passwords every second The problem is that operating systems' core method of storing passwords hasn't changed for many years, but

the speed of computers has increased thousands of times.

My security team continually tells users that they must pick strong pass-

words and not share them. But we've

been unclear about what counts as a strong password.

if your encrypted Windows password file is stolen, even a low-end backer has enough computing power to break it

in a few days It would be nice to be able to make sure that nobody can access our passwood file and to teach our users not to pick the top 100 risky passwords that a backer might use in an

#### antino ottock Dire Situation

My predecessors spent mans thousands of dollars on cracking software and hardware to test the strength of presumpte and they found that about 15% of the passwords used in my company are weak. This is actually lower than the industry average, which shows just how dire the situation is in the financial services industry

But had a lot of work been done to find and educate the users with bad passwords? No. Some grand schemes had been discussed about replacing passwords or improving operating systems so that only good parmingle could be choose but nothing was over delivered.

The result: In addition to allowing those had nacowords to be in use, my department was also running a computer that had a duplicate upencreated list of all of those had user accounts and passwords If someone had stoleo that list, we'd have done the hard work for them!

So this week. I began asking team members to call groups of users with weak passwords and discuss better password choices. It turns out that most of the users we've called so far wereo't using those accounts and didn't know they had

them. At least we can now delete them. We may have done only half the job with passwords, but in other areas we've done a job and a half. For example, when my team and I dispose of a computer, we use a utility to wine the disk clean. We overwrite every part of the disk with a string of zeros. But the tool we use is slow and must run from a floppy disk.

For some reason, my predecessor forced the IT support teams to use a different floppy for each target machine, write a log of the actions back to each floogy and theo bring them to the security team to

he checked This works fine with one or two machines, but after we conducted a disaster recovery test where hundreds of machines had to be wiped and returned to the disaster recovery services vendor, we found that creating and then checking the log data on all of those floroies was a buse waste of time Nonetheless it took a lot of convincing for everyone to

follow a new process based on more trust in the support team. I knew I was in a new company when members of the support team finally admitted that they didn't like producing the logs and had just been giving the security staff the same floppies after each test with ancient log entries on them. My staffers had never caught them because they weren't checking. Everyone was just

going through the motions. It's nice to find a process that takes less time for the support teams and less time for my group and actually ends up with disks being

I'm sure these woo't be the last problems I encounter, but if I can ensure that we have good passwords and establish realistic policies that get followed, then I think we can improve the level of protection around here

wined clean

#### WHAT DO YOU THINK?

This week's journal to written by a neal security manager, "Unce Tueeday," whose name and employer have been disqueed for obvious researce. Contact him at sense, tuesday@hyshmail.com, or loin the discursion in our forum QuickLink #1500 mager's Journals, ap online to

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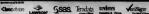
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#### Toshiba Boosts Tablet PC's Power

Totalita Corp. In Totayo has introduced a new tablet PC with beneful up processing power. The Partings M200/2005 features an initial Paratism fill chip that operates at 1.5 64tz. The M200/2005 also features an advanced video card from Widels Corp., the GeFeron FT 60: 5200, and a built-is Intal Contrino chip set. Pricing starts at \$2.460.

#### MCI Enhances VPN

Service Portfolio
World'Don Inc., operating under
the name MCI, has assessment
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#### WebLogic Platform Ported to Sun OS

BEA Systems Inc. In San Jose will port its WebLegic Platform 8.1 to San Microsystems Inc.'s Sciarls x86 operating system, there companies said last week. WebLegic Platform is Jam serve activene for developing and integrating business applications. The porting is expected to be

#### Wild River Joins Linux Project

Whet River Systems Inc. In Atemote, Call., has joined the Carrier Grade Linux privach belop puttogether by Open Scarce Development Labs Inc. to develop Linter for use in selections and telecommunications equipment and applications. Whet River has also joined the Edipse Consertem, a Rakigh, K.C.-based opensources leeds greacers leed spreament and control lines. PAUL A. STRASSMANN

# New Weapons of Information Warfare

HE OCTOBER ISSUE of Communications of the ACM featured papers about future robots capable of performing self-organizing tasks. The authors showed how accellation in the processing power of computers means that machines could soon reach the capabilities of living creatures, at an affordable cost.

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The table below, from the
Association for Computing
Machinery article, shows the
"computing" capacity of organisms and illustrates when
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or are expected to have
equivalent processing power.

or are expected to have equivalent processing power. Instead of thinking about the rising potential for robotic machines, is occurred to me that software with the intelligence of a mouse or a monkey would have the frightening expectly to launch a new form of net.

work-based warfare. So Jan our approach to securing information networks has been static. The attackers write clever code that it shall apacked to potentially vulnerable apparatus on the Internet. The hostic code is designed to exploit the known weak-nesses of millions of computers as well as those of other programmable devices connected to the global Web. The create of the damage depends on the speed with which the corruption processes:

and on the speed with which defenders can deploy countermeasures. The Security Intelligence Products and Systems organization estimates the worldwide cost of durange from digital states from Jan. 1 to mid-November of this year to be between \$170 billion and \$203 billion — up freen \$110 billion to \$100 billion for all of 2002. And that estimate doesn't include costs for installing increasingly burdensome defensive measures.

measures.
To place this figure into perspective, one must consider that the estimated total cost of information security failures is about 10% of the total global cost of business computing. In a year when the increases in budgets for

business computing remain in the 18-10-26 range, the net effect of the losses from attacks in a cut in available apending to support money-making business applications. From that point of view, the costs of software attacks can be seen as inflicing economic damage comparable to that of a major terrorist incident.

The question then arises of whether

I be question then arress of witering the current approaches to inditioning defensive measures — as promised by software vendors, consultants and your own security personnel — will be sufficient to overcome steadily escalating security threats. This is a classic problem in waging defensive warfare, where the forces of attackers must be neutralized by the capabilities of the defenders. In force vs.

counterforce war gumes, attackers can be defeated if the learning cycle of the defenders is faster and their resources are adequate to disable the aggressors. Unfortunately, the outlook for information security from the standpoint of information warder isn't encouraging. Current methods of blocking intruders rareh likely to be adequate to secure Internet commerce. When swarms of adaptively learning software strackers

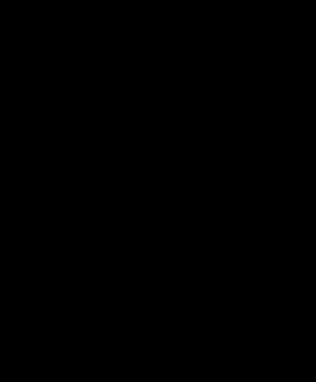
ternet commerce. When swarms of adaptively learning software attackers are launched, they will have the capacity to serious me the capabilities of the defenders and to modify their attack plans secondiagly. The balance of power will shift in favor of the attackers. The court of launching attacks will decrease and the expense for defenses will escalate until it becomes prohibitive for companies to pursue the current policy of deferrine to state defensive measures.

The present methods for security as surance are as obsolete as Cold War military tactics. Regardless of how many firewalls you put up, a software "robot" with monkey-like intelligence will find ways to punch through and then inform other roaming attackers where to penetrate. Resardless of how frequently you patch your software or how often you download virus updates, self-aware mutant code will bypass defenses that were programmed for old potterns of attack. In the new era of information warfare network defenders must use new tactics. They will have to launch active countermeasures to disable the learning capabilities of the aggressors. Networks will have to be designed for initiating search and-destroy software that will find at-

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Service Portfolio WorldCons Inc., operating und the name MCL has are that its new IP VPM Broadh service is available in 55 cities. With the service in an Internet DSL Office scenario, users wo pay \$100 to install a Cinco VPN 831 router, plus about \$200 per nth for the DSL connection and management of the router. A the user's hub location, the fee wid be \$1,000 for a conce for and \$1,400 per month for T1

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PAUL A STRASSMANN

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In the new era of information warfare network defenders must use new tactics. They will have to launch active courser measures to disable the learning capabilities of the aggressors. Networks will have to be designed for initiating search and-destroy software that will find attackers faster than the malevolent software can focate new vulnerabilities. International cooperation will be essential in identifying and neutralizing the sources of disruption. Punitive liability will have to be applied in cases where negligence fosters the proliferation of insecurity. Most important, the influence of CIOs will have to rise, because securitv has now become the primary impedi-

#### Processing Power Accelerates

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Thinking Like a Manager OSA: Harvard Business Review author Jonathan Gosling tells why good managers are emerial to a company's success and identifier five mind-sets that can help you think like a manager. Page 46



CIO

CIO on Board

Being asked to join a board of directors can mean you've "finally arrived." But it also carries risks and liabilities. Here are 10 things a CIO should know before taking 8 SCat. Page 48

Transform the Year-end Planning Ritual ion: Columnist Paul Glen provides a new way of carrying out the dreaded annual planning exercise that focuses oo organizational teamwork so you get better results. Page 52

Software contracts are full of hot spots. Here are some tips for not getting burned. By Kathleen Melymuka

OME VENDORS ARE LIKE DISNEY VILLAINS," SAYS Brad Peterson. "They're manifestly evil, and you have to watch them." The villains among vendors don't make their big money on initial software licenses, he says, but once you start building your company around the software, they go into "harvest mode," charging substantial fees if you want to continue using that software after mergers, acquisitions or outsourcings, or even if

you need to let consultants or contractors use it at your site. "If no one has taken a look at a little clause like 'right to transfer software, that's where their profit is," says Peterson, co-author of The Smart Way to Buy Information Technology (Amacoun, 1998) and a partner in the outsourcing practice of Mayer, Brown, Rowe & Maw LLP in Chicago. "You really have no choice but to go back to them and ask them how much money they want."

Your only real protection is to understand those "little" clauses before you sign the contract. Here are nine of the more dangerous ones:

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the software, and where ey entitled to use it? Is the

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STATEMENT OF WORK What to watch out for:

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What to watch out for: Who has the rights to custom software you co-up with a vendor?

Doloss you've spalled it out other-se in the contract, the vendor has right to license to others whateve

ne right to income to others whatever offware you develop together, includ-ag any best practices or proprietary rocesses you've built in, Roy says. Development agreements should pell out ownership of whatever im-revenents or input you provide. You should withhold from the commercial oduct any proprietary processes that we you a competitive edge, Thomas ys, but the wendor should be free to case other enhancements. For enis that fall in the mid compromise by holding them back from the market for a year to allow you to get a jump on your industry.

CONFIDENTIALITY
What to ventoh out for:
Do your employees sufficient
stants in the anyhores they was? Do your
If not, your company may be held repossible for the actions of employees

J.P. McKenzie, a purtner at Gordon & Glickson LLC, a technology law firm

in Chicago For example, your company signs a contract with Software Vendor A that stipulates that your company won't compete with the vendor, Jane, your chief architect, later leaves to form a software company that competes di-rectly with Vendor A. "Vendor A isn't ing to suc Jane unless she's a rip-aring success on Day 1," McKenzie rs. "It's going to sue the company th the deep pockets, which is you." You're responsible for explaining rules to Jane and having her sign a noncompete agreement, McKenzie szys. "But in a world where we're all

trying to cut expenses, nous. ... detail can get cut out of your process. And that's a really bad ides." WARRANTY
What to wester out for:
Is the vendor promising to
meet your business needs or

You may think you've bought the ution to your business problems on you've really bought only the warm you've really bought only the right to use the software, which may or may not meet your needs, Peterson ex-plains. Regardless of what the sales-person promised, he says. "the con-tract is the first." erson promised, he says. "the con-

ns of the parties." Resist pressure to do the deal quick-y, he says. List your specific needs and y, no says. List your specific needs an what the software has to do so meet those needs. Then get the vendor to commit in the contract that the software neets those needs. "Think it through, write it down, and determine whether works out a commitment " he save

IMPLEMENTATION What to watch out for: If you allow a vendor to an implementation deadling

ave to be careful when you "You have to be careful when you push back the thining that you don't wind up giving the vendor an unfer-tered right to never complete." McKen-sie says. When you let a deadline silde, there's a tendency to just say the new deadline is whatever the parties agree on, she says. But if the vendor has oth-

on, see says. But the vendor has our-er, newer priorities, it may never agree. If you decide to change any dates, be very careful and put the new dendiine in writing, she says. "And make it clear it's a one-time-only deal."

LIMITATIONAL

hat to watch out for: If everything goes wrong, can the vendor pay a relatively small fee and leave you holding the bag In virtually every contract, McKen-zie says, there's a limitational liability clause that lays out the max nom a w dor would have to pay if it did everything wrong. But in this economy, son wendors are using such clauses to get out of bad deals. "If the wendor is losout of bad deals." If the windor is los-ing money on the deal, we cometimes see these just hand you the limitation liability and walk," she says. "We're seeing those more than ever before." Negotate a limitational liability clease that's very large or even milin-ited, she says. Then the vendor has to ake the engagement work or fin

UPGRADES
What to watch out for: Do you have to pay for major software apgrades?
Upgrades are normally included in

the maintenance costs of a contract, not vendors like to add a clause star but vendors like to add a classe staring that when they believe an upgrade is major, you have to pay for it, Peterson says. If you allow such a clause, you've got no leverage, be says. "You can't de-cide to stay on the old version, because after a while it's not supported, and ter a white it is not sory painful."
Negotiate the right to upgrades.
"The particular and a surface "You're protecting your fature an making sure you don't have large, expected costs," Peterson savs.

What to watch out for Is there an objective warra

Is there an objective warrung by regarding response timed. The biggest reason CIOs get fired is response timed see the objective reason CIOs get fired is response timed warrung to the contract which was the objective and you can go have a coctact which was a system where you hit Taster and you can go have a coctact which was not possible to see the contract which was the contract was the contract which was the 4

Melymaka is a Computerworld contributing writer. You can contact her at kmelymuka@yahoo.com.

LEASE LAND HOURS

# Contracting Tips\_

Here are some general software contracting too from Phil Rode director of training at International Computer Nepotlations Inc., an IT nencumment consultion from in Winter Park Fla

Assume nothing. The vendor, as licensor, has all the rights; you as Iceasee have none except what's in the iconse acroement. Use your own license agreement.

Vendor contracts am designed to protect vendors. Your contract should protect you. Nearly all moles software vendors are open to using -

Lay out your expectations - such as the use of your company's contract - early in the process so there will he no surprises or bettles of will at

the end Use your leverage while you've got it. Demand the rights you need and will need in the future before you sion the contract. If you try to expand your rights down the mod

vou'll have no leverage. Choose your battles. Vendors respect customers who fight for these nahts, but they lose respect for those who waste time making mountains out of molehills

## Weasel Words

In any contract or license watch and for "weened words" that seem to imply something that isn't really guaranteed, says Diana J.P. McKenzie, a partner at Gordon & Glickson, II a vendor contract says, "Our goal is ... " or "We estimate ... " don't confuse that as a commitment she

says. "K's not If a contract says, "Our goal is to return calls within the hour," the only thing that means legally is that the vendor thought it would be able to do that, not that it actually can. she ext

"Folks get fooled into the language of goals, 'estimates 'hopes' and 'plans,' " she says, "but those are not a guarantee. You need something that says. We will return calls within the hour." That has an entirely different legal meaning - Kethingo Mehr



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# Thinking Like A Manager

Today's obsession with 'leadership' has taken the focus off the critical importance of good management.



Everyone wants to be a great leader, but nobody aspires to be a good manager anymore, says Junathan Boelling and co-author Henry Mintzberg in November's Harvard Business Review. But leadershin without the

foundation of good management can be destructive, says Gosling, director of the Centre for Leadership Studies at the University of Exeter in England. He talked with Kathleen Melymuka about what it means to think like a manager.

Why is thicking like a manager so imperture? IT managers will appreciate that a lot of word pose into maintaining an IT network that node/is known about this there's a log system change. But maintaining the coordinating of activity is seen as sound-rise, where blitting is seen as sound-rise, where blitting is seen as sound-rise, where blitting with the control of the control of the maintain reality has people come on work and do so much productive truff together. And it has to do not only with bein lock it? And so careful attention to

keeping an organization together.

You offer five "mind-sols" to get managers on the right read. What do you mann by a mind-soff Habitual turns of mind. Some people, for example, tend to be habitually reflective. Whatever's going on, they will ponder, and you see that thev're making connections in

to be habitually reflective. Whatever's going on, they will ponder, and you se that they're making connections in their internal world. Others are much more action-oriented. They just want to get on and do it. We think it's very important that people find different mind-sets in themselves. We 're trying to help the reflective person to find in herself the pleasure of action and practice it and get at home with it.

The first mind-set is reflective. How would

a rubesthe mind-set bab on IT manager do his jab better IT relation to working with salespeople, for example. The salespeople just keep banging their fissts, and you, as an IT manager, keep saying. "Let's be realistic about it. This will take time." The reflective mind-set will think, "How am I responding! How do I spaper to them? I wonder how I can communicate more effectively with them so they can see thines.

from my positione."

Or during a change process, it's often helpful to think, "Have I been through this before in some other sixuations! What can I learn from history." It has a set to do with the process of the some state of the state are to do with the process of the solid through the state of the solid the process of the solid through through the solid through through through the solid through the solid through the soli

Heart is the analytical mind-set, but you want managers to get buyend traditional nanhysis. Can pen englash why and how?
Analysis is a bugely powerful process for taking a consplex situation and breaking down the constituent parts. But taken to extremes it becomes a pleasure all its own. You can analyze every bit of work and put a cost to it and forment that the whole point is to

serve customers.

Analysis is like the left hand in a piano piece: You also need to be collabrating with the overall business mission. And some problems are about
making others are shown and the collection with uncertain outcomes. The
kind of analysis there is rather differment. For example, should we relocate

IT services to Bangaiore? It's relatively straightforward to look at cost but much more complex to evaluate longterm strategic implications like compony identity and employment issues.

You want managers to have a worldly saled-set rather than a cickel one. What's the difference? Recordly specified we're interpreting "global" as seeing the globe as a unity converging toward more and more common were of doing things, looking at different parts of the world as extensions of a single marketplace and seeing each exchange rela-tionships as part of that global marketplace. If you're actually put in charge of a joint-venture operation in Korea. however, you will find the world looks quite different from there. The market looks different; people behave differently; the reason they're in the joint venture may be different from your reason. You see that the world is made on of a host of different interest groups

and value systems.

A manager has to give people a sense that they belong to the community they know but (that) what they belong to is meaningfully connected to this bigger system of things. That's worldliness.

In the collaborative scale set, yes may yes move from smanaging scepts in measuring recent in the managing recent in the managing recent in the managing people, it is not if the manager with the manager in the set of relationships and as if people were not willful characters of their own, it's a very depensabling experience to be managed in this way. It's much more rewarding to say.

"How do we together make this place work?" Really what they're doing is trying to finesse the ways in which people relate so that out of that relationship comes productive work.

We say that the action mind- set can beoft from a Rich Ismalliz, What de you man? Often there's the notion that I, at the book, made this place change. But as modern remember of the staff, the same properties of the staff, the same properties of the staff, the same properties of the staff, though yourself. So let't be clear though yourself. So let't be clear though requires a combination of the though requires a combination of the though requires a combination of the the mind-sets we've discussed, but it's not all about the trust chase shower six-

This is a lot to juggle. How do I just it all together? When you think abour your way lob, you probably already exercise all those mind-sets in part. If you really like that little bit of time in the morning in the car reflecting and getting ready for the day, then maybe if you take a five-minute walk in the middle to the day, that might help too. What about mahylac? Maybe, your IT department works fine together him to receive he with ment to you the fine the part of the day. The property has the property of the property of the property works fine the property has the property of the property has the property of the property has the property of the property has the property has the property of the property has the property has the property has the property of the property of the property has the property of the pro

ting on high moving pieces around.

when it comes to working with outsourcers and vendors. How can we improve those relationships? And it goes on from there. © 42312 Melymuku is o Computerworld con-

Melymuka is a Computerworld contributing writer. She can be contacted at kmelymuka@yahoo.com.

This is the latest in a series of monthly discussions with Hervard Desirons Review authors on topics of interest to IT managers.

Two Takes on Management

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September 1 for Market Market

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# **Executive**

# **Our Hottest Security Tips**



OR MANY Clos, being asked to serve on an outside board of directors is evidence that they fee finally arrived And why not? Board membership is public recognition that a ClO has experience that another company crews. It's also an opportunity to make the company crews. It's also an opportunity population of the company crews. It's also are proportionally to the company crews. It's also are proportionally to the company crews without the company crews with the company crews and company crews with the company crews with the company crews and company crews with the company crews and crew crews with the company crews with the crews and crews and

stock options.

However, GlOs dreaming about board membership must realize that being asked to serve oo a board inn't like winning an award. Ever since Congress passed the sixthmen-Colley Act reforming corporate governance, boards have gained more responsibility, which means that board members have more work to do. There's also the risk of lawsuits, especially now that shareholders are so quick to sue

when a public company goes south.

To better understand the pros and cons of board
membership, Computerword asked five boardserving CIOs (and some corporate governance experts) what a CIO really needs to know before joining a board.

YOU'RE A VALUABLE ASSET TO THE BOARD.
There's no question that a CIO can add value, according to Marry Chuck, CIO at Agileot Technologies Inc. in Palo Alto, Calif., who serves on a board of Servicote Technologies Inc. in Milnitus.

Calif. "CIOs regularly counsel their own executives regarding choices they can make to optimize their business with TI," so it's not a stretch for CIOs to advise other companies' CEOs, Chuck explains. "This experience puts CIOs in a unique position to suide and counsel emergine as well as established

companies."

Palsal Houge, chairman and CEO of Enamics Inc., a Stanford, Conn.-based IT management software and services firm that has always had a CIO on its board, agrees that this is true, especially when the board is for a high-tech firm. "A CIO helps the IT vendor stay on target with its catomers." says Hoque. "It's a way to make certain that your sales efforts will work in the real world."

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Shooth are gring maller and none selective, which makes it less likely for Clits to be uncertained, excepting to Fills Sciendiarmsyer, coultre search firm in Stanford, Coon. "Most firm coulting to read present from its Stanford, Coon. "Most firm coulding from perceives with extensive spectional and financial experience," the capitals. Understand, COO search whys see an baring a variety, COO search whys see an baring a variety, COO search whys see an baring a barinet, COO search whys see an baring a barinet, COO search whys see an baring a barinet, and the size of the

Continued on page 50

Joining a board of directors looks good, but today it carries new liabilities, too. **BY GEOFFREY JAMES** 

CION Board

# Can you see it?

#### Middleware

- 1. Instantly admitting patient.
- 2. Immediately processing claim
- 3. Automatically approving procedure
- 4. Constantly tracking treatment.
- 5. Directly assessing costs.

MIDDLEWARE IS IBM SOFTWARE. Powerful software including DB2" Lotus," Rational, Twoli" and WebSphere" that develops, integrates and manages your applications and systems. Everything is efficient and seamless. Across the board. Across platforms. Microsoft Oracle. Sun. You name it. IBMs flooble open middleware can connect it all, it's instant business benefit. Instant customer satisfaction. On demand. @business on demand at ibm.com/software/integrate

MICH I NEED TO BE HIGHLY VISIBLE BEFORE YOU'RE ASKED.

Bounds are looking for CID candidates who have consistently delivered innovative results and value through technology for their companies In order to be considered for a board, you'll need to increase your visibility to outside companies by actively networking with key industry influencers and buard-level decision makers. Receiving prominent industry awards and maintaining a strong relationship with your own company's top leaders will also foster your professional reputation, says Carl Wilson. CIO at Marriott International Inc. in Bethesda, Md., who serves on the board of Enamies, "When interviewing for a seat at the board table, a CIO candidate should directly highlight how his unique skills would add value in entiding the outside company and enhance its heartfu commercition "he was

#### THE BOARD MAY BE A DISASTER WAITING TO HAPPEN

CIOs asked to serve on the board of a rub licly held company must be acutely aware of any potential regulatory problems that the firm might face in the future according to Maryanne Peabody, vice president at Boston-based Stybel Peabody Lincolnship Associates a consulting firm that works on corporate governance issues. She says board candidates should never be satisfied with the information a company provides during the recruitment process. Instead, they should die through financial reports and even check the employment history of the chief executives. "A company that's restated its revenues is a big red flag," she says. "Another danger signal is a board that's domi-

#### YOU, AND THE REST OF THE BOARD. COULD SET SUED

While most boards have special liability insurance that covers stockholder lawsuits, the coverage may be madequate. For example, a policy, written 15 years ago might only cover each directur for a quarter of a million dollars - an absurdly small sum in today's liticious environment. Worse, some policies stipulate that the board members don't get reimbursed for legal fees until after a case is settled, according to Raiph Ward, publisher of "Boardroom Insider," an online corporate gover-

nance newsletter. "Being on a board isn't what it used to be," bemoans lack Cooper, former CIO at Bristol-Myers Souibb Co., who sits on the board of Lourdes Health Care Center Inc. in Wilton, Conn., and Concord Communications Inc. in Marlboro, Mass, "There's a lot more risk, especially if the firm is public."

#### YOU MIGHT NOT GET ALL THE INFORMATION YOU NEED.

While boards are required to understand what's going on inside a company, they aren't always able to get the quality information they need to make good decisions. "You're very much at arm's length," says White, "Unlike in your own firm, you don't have the ability to see what's happening day to day." CIOs should also be aware that some companies have a history of keeping their boards in the

#### How to Get On a Board Of Directors

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dark, according to attorney Thomas M. Parry, a partner at Marzouk & Parry, a Washington law firm that specializes in high-tech litigation. Parry recommends that board candidates talk to other independent board members to find out what documentation the company provided to resolve past issues, "You should never get into the position where you're a rubber stamp for management," he warns.

#### YOUR FELLOW BOARD MEMBERS MIGHT BE COMPUTER-ILLITERATE.

Remember back when executives thought it was degrading to have a PC un their desks? Boards of directors are the last bastion of this curious form of computer illiteracy, Cooper says. "There's still a general level of ignorance about tech-

pology in the top bactions of corporate life." he says \*Board members know theoretically that technology is important but they're fearful of busine their ignor rance exposed."

The danger is that the board may consider the CIO a "token techie" rather than a real contributor. "Eve seen companies hold out a CIO on the board as proof that they believe technology is important when in fact the company was behind the times." says Schneidermeyer

YOU'LL BE ASKED TO DO SOME REAL WORK.

Gone are the days when serving on the board meant a half-day meeting each quarter, followed by golf and then drinks by the pool. Given the current climate of regulation and scrutimy. companies now expect their board members to make substantial contributions of time and effort. Cooper says. "Make sure you have an understanding of what the board expects you to do" be advises. Travel can also become a burden, adds loe Farrelly, CIO at Aventis Phormacouticals Inc. in Bridgewater, N.L. who serves on the boards of Aperture Technologies Inc. in Stamford, Conn., and NetNumber Inc. in Lowell. Mass "From a practical and nersonal standnoint always bear in mind that travel and time-zone logistics can become an issue given the need for recurring face-to-face participation," he warns.

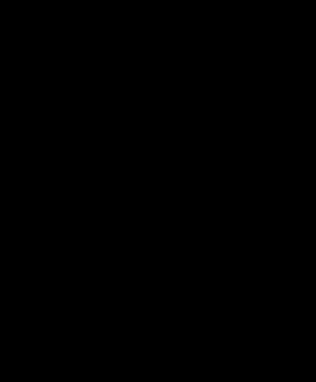
#### YOUR COMPENSATION IS UNLIKELY TO BE LAVISH.

Being on a board used to mean serious monev and lucrative stock options. That particufar erany train has just about non out of steam, according to Parry, who points out that regulators now look askance at assigning options to outside board members, because doing so might compromise their independence. That's not to say that there can't be fipancial rewards for serving. Nonstock compensation can range from \$50,000 to \$75,000 for a major comnony and considerably less for a smaller firm Schneidermeyer eyes However Cooper notes that some ClOs may not be able to collect that extra salary because "some companies don't let their CIOs receive compensation from being on outside boards."

YOUR CEO MIGHT NOT BE ENTHUSIASTIC ABOUT THE IDEA. Ideally, a CIO on an outside board gains experience and perspective that are valuable to the CIO's own company. However, CEOs may not see it that way. Even some CIOs are skeptical. "I'm not convinced that Ross Stores gets much out of my sitting on the board of another company," White acknowledges.

Don't lose heart, though. "Your participation on a board is an opportunity for you to draw on the experience of a wide range of executives " says Farrelly "And it's a chance to round out your own knowledge of budgetary, HR and other non-IT-specific issues." Board membership can accelerate your career as a ton executive, and that may be worth losing a point or two with your current employer. O 42646

James, the author of numerous high-tech books and articles, can be reached at his Web site. www.geoffreyjames.com.



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James, the author of numerous high-tech books and articles, can be reached at his Web site, www.geoffreviames.com.

## Can you see it?

#### WebSphere

- New design already tested.
   Suppliers already linked.
- 3. Procurement already automated.
- Procurement already automated
   Blueprints already updated.
- 5. Engine all ready for takeoff.

MIDDLEWARE IS IBM SOFTWARE. Powerful software like IBM WebSphere\* Using an open and scalable foundation. WebSphere software lets you swiftly respond to change On demand. Applications are seasy updated, tested and deployed Lead time is shortened. And everying clocks, regardless of platform. WebSphere delivers if all. On the money On demand. Qualified the command fail lime wealth websphere/indiciowers.

#### NEWSMAKER



tober as CIO at --- A-- B--cial inc., one of the count back

ents. Time busines, and the hig driver for me taking this job was to get back into the bashing industry," he says. Quinters, 43, will lead Charter Case's IT division of about 200 employ nes, He tailant with Jean Constrict about the banking industry.

arter One changed from a thrift to a bank last year. What IT challenges are you still dealing with from that changeous? The biggest change is a new set of regulators. It used to be the Office of Thrift Supervision, and now it's the Office of the Controller of the Currency. They have different outlooks on things, tougher expectations, and technology is part of that,

Are they on alle examining opera all the time? For a bank our size [\$44 billion in total assets], they're pretty much here all the time. They're not looking at the technology area all

Do you think that's a good thing? Sure, for the most part. You have to make sure that people are doing the right things for their customers, their shareholders. But at the same time. there's a lot of bad people out in the world, unfortunately, trying to break m, or once they're inside, they try to do something. And confidence in the barrieng industry by the public is certerrly very crucial

What IT projects are on tag? Lots of stuff, that's what I'm trying to sort out. We're expanding a lot; we've added 100 now branches this year, and we'll continue that growth next year.

is this a challenging time for banks Definitely - and for technology. we's no product that a bank can controlled by computers, so we're integral to the whole product development and servicing aspects of the business. © 42935

PAUL GLEN

# Transform the Year-end **Planning Ritual**

NCE AGAIN, 'tis the season for annual planning, an exercise that fills managers with hope, dread, despair and anticipation. It's a time when we contemplate the future of our organizations, technology

and nersonal fortunes For most companies the planning process takes place in a management meeting that can last as little as a few hours or as long as a week. But most of the arendas for these meetings are basically the same.

They include: What did we do this What do we want to do

next year? And, occasionally, Who's going to be respon-

sible for making next year's stuff happen? Of course, hidden in these deceptively simple

questions are myriad subtle and difficult questions about technology, alignment, strategy, priorities and budgeting. By adding just a few more ques tions, you're more likely to garner the benefits of all this planning. It's equally important to address the following: How did we work together this

· How do we want to work together next year?

# How can we make the transition from how we were to how we'd like to be?

These are important subjects, because most of what we'd like to do fails to hannen because of how we work together, not because we've selected the wrong things to do. The dynamics of group functioning are most often at the heart of project and organization failures, not poor planning.

Here are four factors that will beln you figure out whether your organizational dynamics support or detract from achieving

your goals. Motivation. Perhaps the most important determi-

nant of success is the motivation level of your organization. Listless and disengaged teams never achieve great things. No matter how well you plan what these teams will do, they're unlikely to complete much. But truly motivated groups can overcome deficits in virtually every other area to achieve their soals.

Here are a few questions to ask about the motivation of your organization: How motivated are your managers and project teams? How important is it to them that their projects succeed? Do they care whether their work supports a business purpose? How engaged are they with their work

and their co-workers? Structure. How your people are or-

ganized to work together also has a strong effect on group dynamics. More than just identifying the chain of command, the structure of the group communicates a lot about the values of the nization and delineates each individual's role in its collection excount

So consider these questions: Does everyone understand the overall structure? Is it easy for individuals to understand their own roles? Does everyone understand their individual goals

and how achieving them will contribute to collective success?

Leadership, Leadership is particularly important because it has the ability to transform all the other facets of group dynamics. Good leadership offers the possibility of positive change rather than stagnation or chaos.

Although a very complex subject. there are a few questions to ask about the quality of your leadership team. How strong are our relationships with our clients and peer organizations? How do the staffers feel about their managers and one another? Do we have coherent and generally accented

processes and goals? Teamwork, Ultimately, work gets done by groups of people, usually arranged into project teams. How well the members of these teams work together, in many respects, dictates what they accomplish and their ability to carry on after completing a project. While teams in your organization probably have different strengths and

weaknesses, there are often patterns of attitudes and behaviors across teams that are dictated by the organizational culture. For example, do your people tend to trust one another? Do they engage in constructive conflict, destructive conflict, or do they just avoid it altogether? Do they really care about the results of their work, or are they focused on other things?

Planning represents a significant investment of mental and emotional enerry for every organization. If you'd like to improve the return on that investment, I'd advise planning for both what your group will do and how you would like them to do it. With a little extra thought, you can transform sterile annual planning into genuine organizational renewal. @ 42788

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compiler and a set of class libraries. Version 1.0 is due in the second quarter of 2004. "It's definitely on our

emerging-technology gudar We're monitoring it," said Sean Wheeler, director of enterprise technology strategy and planning at The Allstate Corp. a Northbrook, Ill-based insurer with many Net-based applications that now runs I instructly for research purposes, "Obviously, if you can run it on Linux, there's potentially large

cost savings there." However, corporate developers are following Mono with some trepidation. Several expressed concern about Novell's spotty track record with acquisitions, the developer community's uphill climb in keeping pace with changes to Net and Microsoft's potential to derail

the Mono project. "Mono is open-source, but Microsoft would step forward and kill it if there was any real threat to their business model" said Ethan Roberts, a development architect at General Casualty Insurance Company of Wisconsin in Sun Prairie. "Microsoft is under siege from the whole idea of Linux, so why wouldn't they try to derail Mono's success?

> Mono Project Road Man

Microsoft refused repeated requests for comment about its nosition on Mana, saving only that it has worked with partners to standardise parts of the .Net Framework via the European Computer Manuface turers Association (FCMA) and the International Standards Organization.

No matter what Microsoft's current position is. Mignel de Icaza chief technology officer for Novell's Ximian division, is well aware that customers here unreier in the make of The SCO Group Inc.'s lawsuit

against IRM De Icaza said Mono developers have been very careful about integrating code from third parties. For example, he said. Microsoft wanted Mono developers to use Rotor, Microsoft's free shared-source implementation of its Common Language Runtime platform, which includes source code for C# and IScript compilers as well as for the Com-

mon Language Infrastructure "We have a rule: If you look at Rotor, you cannot contribute to Mono. It's as easy as that," de Icaza said, adding that his group recognized the geed to be on solid level from ing with its work. When a large code contribution or-

rives, a third party reviews the changes to make sure it didn't come from Rotor, he said. The greater challenge facing Mono will be catching up with the APIs Microsoft plans to add with the next version of Windows, code-named Longhorn. around 2006, said de Icaza, He said the community will need to rally more developers to get involved, Currently 15 Novell employees and about 150 open-

source community members work on Mono, he said. But some corporate users said they seen't sure they will consider using Mono unless the community can keep up. Walt Smith, chief architect at a large U.S.-based financial institution, said his company will consider the Net devel-

#### Mono Guru Speaks About His Project

The man behind Mono, Miguel de Icaza, CTO for Hovel's Xina Prission, spoke last week with Computerworld about the oper source project that he helped launch to enable. Net application to run on Linux and Unix. Excorpts from the interview follow:

When was the Mone project originally due? The Mone runfirms was introded to be releas a was ago or so. But it was only the [virtuel mechine] and the C# compiler.... Besically, the scoop

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opment environment once it matures in three to five years. particularly in the area of Web. services security. It will also consider Mono to run the applications oo Linux - but only if that technology also matures he said "To remain relevant, Mono will need to incorporate these new security features and a vast array of other .Net features as they anpear," he said. "That in itself poses a considerable challenge for Novell/Ximian."

Smith and some other corporate IT managers said Novell's purchase of Ximian won't necessarily lend any additional credibility to its work. André Mendes, chief technology integration officer at Public Broadcasting Service in Alexandria. Va., said he's interested in Mono and Novell brings some

support for creating Web service and creating Web applications. The two big missing pieces are called Windows Forms, which is a technology for building client anplications as opposed to Web acplications, and we're also making a technology called Enterprise Services, which is used for trans artison management

How would a developer w around the missing client functionality? We have our own set of libraries for doing client functionalty. We just don't have one that will transparently move your Windows client agos to Linus. We have something which is Unitespecific today But by the and of next year, we will have the Windows compatibility

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degree of revenue and cash flow. But he added, "Quite honestly, Novell is one of those companies I could never figure out. They lost the competitive advantage they had in the marketnlace"

"I would really like to see Novell become a legitimate player in this space, but it's really up to Novell," said General Casualty's Roberts, "One thing that Novell seems to be good at is killing some solid technology."

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Novell Vice Chairman Chris Stone said through a spokesman that the company fully supports the Mono project

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What kind of reaction to you getten from Microsoft about the Mone project? The only people who I have talked to are their engineers or the ECMA standards) committee and so far. It's been great. They're very receptive. They help a lot with every problem we have in the spec. . . . They're very supportive

at the originaering level. We've had a few high-level talks with them, but nothing really concrete

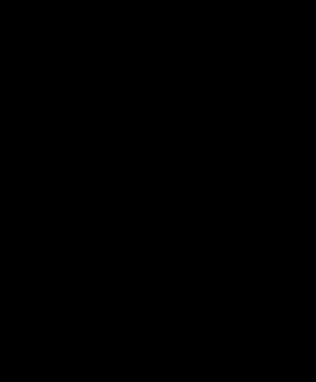
Can you foresee any potential logal tesues? The only potential legal problem is whether there is a petent on farvi APL and we fators a country of contions when we're dealing with patents. The first action is find look for prior art Incause Microsoft mints be granted a potent that they don't really deserve. . . If we connot find prior art, then we will have to remove that functionally from the Mono runtime, and for customers, we'll negotiate a licensu for the patents with Microsoft.

- Carol Shee

and is even considering providing the Mono environment on NetWare so .Net applications will also be able to run on that operating system.

But some corporate users said they don't think they will be running their . Net applications on operating systems other than Windows. "I doubt many of them will switch because of this," said one developer who works for a government agency.

"In reality, I don't think we'll need it," said Richard Eber, director of development services at Hawaiian Electric Co., which has substantial investments in Microsoft technology. He said that even though his company may add some Unix systems in the future. those will be for running Java-



#### Continued from page I Mono Project

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What kind of reaction have you gotten from Microsof about the Mono project? The only people who I have talled to are their encourages or the FCMA Istantiards) committee and so lar, it's been creat Throvine way receptive. They help a lot with every problem we have in the

spec. They're very supportive at the engineering level. We've hart a low teph-level talks with them, but nothing really concrete

Can you foresee any potential legal issues? The only potential legal problem is whether there is a patent on land API, and we heve a couple of options when we're dealers with rangests. The first online is find look for excerart, because Microsoft ments be granted a patient that they don't really deserve . . If we cannot find onor art, then we will have to remove that functionality from the Mono runtime, and for customers. we'll negotiate a license for the colorets with Microsoft

- Carol Shea

and is even considering providing the Mono environment on NetWare so Net applications will also be able to ruo on that operating system. But some corporate usees

said they don't think they will be running their. Not applientions on operating systems other than Windows. "I doubt many of them will switch because of this," said one developer who works for a government agency:

"In reality I don't think we'll need it," said Richard Eber, director of development services at Hawaiino Electric Co., which has substantial insure. ments in Microsoft technology. He said that even though his company may add some Unix systems in the future, those will be for running lava based applications O 43166

EDANY HAVES - EDANFIV SPEAKING

## Gadget Guv

OU KNOW WHO HE IS. (It's almost always a guy.) He's the user who loves gadgets. He's the first one to have every new high-tech toy, from the Apple Newton to a wireless modern to a camera phone. He used to ask you to support his gadgets when he tried to use them for work. And maybe you did, back when you still had the staff and budget to cater to one user's whims.

By now, you've long since stopped that kind of catering. And by

now, he's long since stopped asking, But he's still bringing his toys into work. And that means he may

Think about it Handheld computers enable users to walk out the door with merabytes of proprietary data in their pockets. Home wireless petworking equipment can open up holes in your network big enough to drive a truckload

of hackers through. A webcam with enough resolution is a virtual window into an office. And those are just the innocent problems. In the hands of a disgruntled employee, gadgets

are just about guaranteed to be dangerous. You can't do much about those cases. But as for the gadget freak who finally stopped asking

you for support, now might be a good time to renew his acquaintance. After all the holidays are coming. A new

wave of gadgets will hit your office soon. And your gadget guy won't just be bringing in new toys of his own. He'll also be the go-to guy for other users who get gadgets this year. They already know that your IT department doesn't have the time or resources to help them with home-quality IT gear that's not approved for

use in the office So when they have questions, he'll have answers. And because he knows IT

doesn't want to hear about this stuff, he won't hother asking you for help or guidance.

That's a sure recipe for problems. How do you suppose all those wireless access points popped up on your networks last year? A gadget guy brought them in. He beloed out less sophisticated users who liked the idea, too, But he dido't think about encryption or security or any other complications that IT thinks are important.

By the time you figured out they

be one of your biggest security problems. were there, wireless access points were probably such a scandalous security problem that you just ripped out the receivers and banned

their use anywhere, period, no exceptions, Thus guaranteeing that the gadget freaks would never want to ask you for help again. The same thing has happened, in less visible

ways, with handhelds and digital recorders and cameras and all-in-one cell phones. They're all notential security problems. They're all easy to connect to PCs, thanks to USB ports, and they all have clever (though unauthorized) business uses. In fact, to a user who loves gadgets, there's no such thing as a gadget that can't somehow he used at work So that gadget guy can either remain a prob-

lem for you this year - or become a resource. Find him, Enlist his help, Explain your situation. Tell him you don't want to say no to all the creative uses that users put gadgets to, but you can barely handle the workload you've got. Promise that you'll do your best to help make those gadgets safe and practical if he'll make

sure you're not blindsided by gadgets you didn't Yes, it'll mean a little more effort for you, figuring out those gadgets. And with budgets and staffs still squeezed, that's a problem. But if

you can get the gadget guy on board, he'll do a lot of the work. And instead of hiding gadgets from you, he'll keep you in the loop --which means a lot less effort looking for gadgets gone wrong,

Because the question isn't whether the gadget guy will be there - it's what kind of problem be'll be. @ 42894

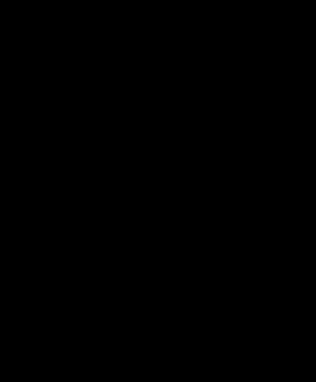


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## Browser

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Getting up to speed on Microsoft Saftwere Assurance TECH ON THE GO ...... Pumped up PDAs for the enterprise FEATURE · Exploring wave to fight sown · Get with the system - the New Microsoft Office System NEW ARRIVALS 16 . The latest from Macromedia and Network Instruments. COLLABORATE \* Got on the same page with JRM and WRO

## **EXPERIENCE OUR** SEE PAGE 13 FOR THE DETAIL

HIGH TECH HOROSCOPES ...... 18

· The Psychics weigh in on Microsoft accessor

ON THE COVER

Michael Hagley - Softchaics Corporation, Manager of IT Architecture and Connection

Photo: Joseph Sharrant

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EEP IT SAFE



#### Disaster Recovery:

## To Be or Not To Be

The great power outage of 2003 cut the juice on 50 million people and left many businesses groping in the dark. Considering the other challenges arrayed against uptime, it's apparent that a solid recovery plan - and proven backup, storage and sume protection - can make the difference between taking things in stride and just plain falling down.

### Delivering End-user Recovery

IBM's Rapid Restore technology at a man-hatton recovery and restore solution to help you rescue lost data, applications and operation systems with the tourn of a button. By creating a complete image backup and storing it in a protected partition on the hard drive, IBM Rapid Restore can restore the complete image often in less then 20 minutes. This unique softwere comes preloaded on all new IBM ThinkPad notebooks and ThinkCentre desktops. By offering an enduser recovery program, you'll reduce downtime and avoid help desk calls, freeing up (T resources to focus on more important things

#### To learn more, go to www.softchoice.com/browser

- IBM Rapid Restore helps protect against: User-induced software crashes
- · Software application and operating system corruption . Virus activity and intrusion







With Kingston's 100% companibility program, the memory upgrade you choose for the IBM Thinkpad T40 is designed to work right. Get virtually any configuration up to 2GB. Issu acco # Kingston

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The Quantum SOLT 600 Tape Drive delivers huge capacity with the fastest native transfer rate, along with media delivering the lowest cost per gigabyte available







#### APC: Defeating Downtime

American Power Conversion (APC) provides protection against some of the leading causes of downtime. including data loss, hardware damage, power problems and temperature fluctuations.

Check out the APC Smart-UPS. Power protection for servers and networks, with 2-vr warranty & \$150,000 Lifetime Fourtment Protection Policy

#### Don't be Scared - HP Makes NAS Simple

The HP Storage/Works NAS B2000 is an entry-level network-attached storage (NAS) solution that delivers quick and simple NAS storage with multi-protocol file support and storage management for workgroups, small businesses, and remote locations. This upstaintime storage is simple to set up for multi-protocol environments. It's also easy to administer requined limited IT knowledge (not that you have limited IT knowledge) soweas or some





#### **Backup Basics** New! VERITAS Rackin From 91 for Windows Servers

This next generation backup and restore solution provides comprehennive cost effective protection for Microsoft Windows server environments A web-based administration console boasts an intuitive graphical user interface with easy-to-use wizards to simplify installation and enhance manageability High performance agents and options -- like the all new Deskton and Lanton ontrop - deliver figsibility to quickly protect desistan

What is this new Desktop and Lapton Option?

laptop and server data

It provides continuous disk-based protection and synchronization for users that are in the office or on the road. What a concept! Designed to automatically copy user data to existing network shares or storage, it enables quick recovery of data by the administrator or the user. For more info, go to www.softchoice.com/browser

#### Push-Button Desktop Disaster Recovery

WERITAS

Backup Exec

Q I for Windows Serve

Maxtor One Touch External Hard Drives make it easy to store, recover and make backup copies of files. The drives have capacities up to 300GB, connect to FireWire or USB ports, and back up with the Maxter

One Touch button, making a complete PC restore easy every time. So if the heavens liver a catastrophic event,



## INFO? PRICING, SPECS AND MORE AT WWW.SOFTCHOICE.COM/BROWSER

#### CA's Disaster Recovery Option "CA Saus" When dissetur stokes this is the most efficient way

to secrees a server. To learn more on to years softchoice.com/browser





Keeping pace with technology - and your competitors - starts with having the latest products, but it's more than just this Maintaining your edge also means ensuring users take full advantage of the technology at their disposal. Microsoft's Software Assurance program is designed.

to help businesses succeed in these areas while making it easier to

forecast annual software budgets more accurately than ever before. For all the details and more, go to www.softchoice.com/browser



for "free" (Salary Savings: \$700-\$8000/vr per person\*1

Telecommuting employees average 14.5 additional work days per year (Average Salary Savings: \$5,240/yr\*) Home User Rights software savings range from \$75-500 per person · Total 'value' of Home Use Rights: \$360-\$13,500° per year per employee PTT Secret Country Borner's Ser

#### Put Your Investment to Work

At a time when training budgets are former selves, the new Software Assurance program offers welcome relief by bringing classroom learning

5 Microsoft's eLearning delivers the student experience to regular users and IT professionals alike Give respires and let them undate their skills through interactive modules and tutoriais on various applications.

Software Assurance (SA) also includes training youthers for

Through the Home Use Program, your recole can get a licensed

Assurance

## Keep It Simple - And Keep

being reduced to mere shadows of their to the desiston

your people access to the latest support

select course from Microsoft Certified Technical Education Centers

copy of select Microsoft Office desiston programs so they can work from home. upgrade their skills or both

Did You Know?

Eligible customers can access Microsoft Windows source code to Environment tool lets you build custom solutions to speed up

deciment through automator Corporate Error Reporting idors and reviews error info therayoloeb edt lattnag at no of fixes and resolutions

Your People Happy

Simplify your budget by

1 Simplify your adopt..., screading payments annually,

nayment. Greater flexibility in managing

reduce initial costs and forecast annual

software budget requirements up to

2 With the right to run new versions of licensed software

as they become available you con

reduce the costs associated with

acquiring new releases and avoid

lengthy purchasing cycles, while

reaging the benefits of the latest

3 Tools included with Software Assurance make it easier to

deploy new product versions, updates

and other content to all desktops and

4 Software Assurance customers can also leverage the Employee

Purchase Program to give employees

significant discounts off of retail pricing

on Microsoft's most gooular productivity

servers, at your own pace.

instead of incurring one upfront

technology expenditures lets you

three years in advance

technology

At the most basic level, handheld devices offer an all-in-one renforement for virtually any personal information tool you can imagine. But they can be so much more! Wireless features can give your corridor warriors in-house instant messaging, data access, printing and data synchronization from anywhere within the office. Now just imagine what har code readers, portable printers, digital cameras, portable presentation devices. and thousands of PDA applications could do for you in the field? But before you go changing the world, here's a look at the latest essentials for putting your PDA plans in motion. www.softchoice.com/browser

Charge, Organize and Protect **ALL your Mobile Devices** 

Ask Yourself: Before you Buy

. Which jobs henefit most? . Who already some handholde? . Any internal preferences?

· Will you designate a standard?

How will you promote secure and effective usage?

Have you planned backup
 maintenance policies?

The HFW APC TravelProper™ Case This innovative carrying case is designed to both protect and power your notebook computer mobile abone AND handheld - all at the same time! The integrated power system helps reduce weight and cord clutter since bulky transformer blocks and power adanters are no longer necessary



#### The Latest in PDA Memory Boosts Kingston's Secure Digital (SD) memory

PUMATECH Check out Pumatech's Enterprise intellisync for centralized management.

cards are the latest generation offering high storage capacity fast data transfer rates, great flexibility and excellent security in a card the spen of a starred **■** Kingston

#### **HP Will Set You Free**

Manage your critical business and personal information on the go with HP Pag Pocket PCs HP combines advanced Intel processors, messive memory spends with the orbust Microsoft Windows OS to deliver brilliant, full-color displays to provide information access with a single tap. Plus. HP developed the PC expension system with accessories such as digital cameras.

har-code scanners and plobal positioning systems to heighten

your productivity. From olim and affordable to powerful and expandable - HP has the Pao to mobilize you

> Security Tips PDAs & Portables

· Always use available word protection features. · Install an e-mail antivinus solution Strengthen security features with add-on software

. Synchronize your PDA regularly . Don't forget backup for





## Cashing In On Document Management

When was the last time a dash to the printer made you think about saving money? The truth is effective document management can make a huge difference to your bottom line. And we're not just talking toped Check out the host of new tools available including multi-purpose devices, new workflow software, and the 'digital ink' of Tablet PCs. We've got technology that's changing the possibilities for document workflow, with even more online at www.softchoice.com/browser



Ask Yourself:

. Often generate user complaints? . Have problems with supplies?

#### Improve your Printer ROI with OKI

After applying operating factors like color coverage, toner expense, and parts life to calculate the total cost of printing, you'll find the OKI process is simple, smart, and efficient. OKI color printers sell on value, and the CS300n toos the charts. This printer can replace - and stretch





or SCSI\* Consider on the 8290

### Save \$ The HP Way







HP Scaniet 8200 Sectes

Turn namer files into digital files with the HP Scaniet R200 series. Scanning unattended with speeds up to 25 pages per minute at 4800-doi cotical resolution and 48-bit color along with multiple scanning attachments, the HP Scanjet 8200 series scanners are perfect for any small business/workgroup document management needs. The HP Scattlet 8200 series connects to your PC quickly and easily with USB in-house color printing that gets

#### HP Color LaserJet 4600

results preve

The HP Color LaserJet 4800 series printers with HP smart printing supplies are a reliable and affordable way to get high-quality color laser printing at the same speed as black and white. The efficient, simple design offers easy networking, management, and maintenance features so the entire workgroup can benefit from





#### **CRAVE MORE INFO?** CHECK OUT



**Pump Up Your Workflow** 

In standardize and streaming time consumers people-based activities and track their propress. By providing a platform for automating, refining and managing complex husinoss nincessas Lotus Workflow morning response time and reduces costs Using Lotus Workflow, you can create workflow applications that perform these processes more quickly and consistently with fewer bottlenecks. Applications can be easily updated to reflect changes

or build increased officiaries etc. the process www.softchoice.com/browser

IBM Lehis\* Workflow allows consocrations

#### Graphics on the Go for Tablets



## Grafigo 2







## things come from a m www.softchoice.com/browser brother

Tablets do it with Digital Ink HP's Tablet PC allows you to capitalize on the convenience and simplicity of paper and pen - without all the paper. With the ability to recognize and translate your natural writing style, store and exchange information as 'digital ink', and do cool things like draw free-hand diagrams, this sleek device is providing compelling reasons to change the way we do

#### Brother Delivers It All

The Brother MEC-98200 is a 5-in-1 networkable flatbed laser multifunction center combining performance connectivity and reliability It delivers ultra-sham mosochmen laser resolution at the fastest print speed in its class, up to 17ppm. With its PC fax capability you won't have to depend on paper documents, saving time and paper costs as

#### **Mastering Document** Exchange

Scansoft's PaperPort Pro 9 Office is the most efficient way to organize, find and share noner PDF and doutel documents It combines the power of PDF creation the convenience of network scenning and the efficiency of document manage-

ment, into a single. easy-to-use deskton anolication saving both time and money CO BOM BYE



EATURE TO

10

Fight Spam:

# Become King of the Ring



Sometimes the best offence is a good defense. Mothing could be true when you're going toto the with one of the biggest epidencis of 245 scenary. According to several necessit reports, there's more spam cruising amount the internet these days than mall e-mail. That means added security risks, were enginged productivity, ownercous pressure on handwidth and of the very real security risks. were enginged productivity, ownercous pressure on handwidth and of the very real threat of hostile vortigation claims resulting from offerents content. But who says you have to be partitively, severe and destrop, Softhonico can help you know out out spam for good. Check out our leading spam fighter, and the notified your more at wearsoft-basic confirmers.



#### Stop Spam at the Gateway



Trend Micro\* Spam Prevention Service
#1 Global market share leader in server-based virus protection, gateway and email server protection Spam Prevention Service is a high-performance, arti-spam acolication designed to block non-productive and malicious spam at the pathway.

Spain Prevention Service employs patientpanding heuristic technology that evaluates, identifies and moritors existing and new messages and multiple entiting and new messages and multiple entitle and multiple and characteristics, providing highly accusate spain capture resident polyly accusate spain capture seaming and consent security solutions. Spain Prevention Service analysis melling in memory to additional the performance and scalability organisments of the abbid enterpols.

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E QUOTE S1000 FOU COULD WIN SEE MARE 13 FOR BETALS gateway and e-mail server for more

complete protection.

Combine hardware and award winning software with integrated appliances offence configure-and-forget solutions to make anti-spam and anti-virus paterway defense instant, complete, and low-cost. Plugs easily into virtually any existing network and scans SMIP traffic for spam and malicious content and SMIP HTTP FIP and POP3 traffic for viruses and other hospile code. Get pules-based

anti-spam protection, with a catch-rate of unito 95% and a false positive rate of less than 0.05%, and unlike most solutions, you can install this at the



€ McAfee



#### Combination **Punches**

Softchoice has heavyweight Spam fighters for every type of network defense. Get your combos ready - this isn't a one-ounch fight.



SMTP server, or on a dedicated machine.

Chop Spam from the Server with MailMarshal

A critic's favorite. Notin MailMarshal is a fast and easy to use server-based scanning solution to help you control the type and subject matter of material entening or leaving an organization via email. For small businesses, it can be used to replace the existing mail server for up to 500 users Larger organizations can co-locate the product on the

Continues on page 12 +

Syhari Delivers Enterprise Anti-Spami

Known for best of breed messaging security solutions. Syban now delivers Advanced Snam Defense (A SOII This robust, scalable anti-soam solution effectively reduces the impact of unsolicited e-mail traffic on your corporate networks

Specifically designed as a stand-plone real time detection CONTRACTOR ACTOR delivers accurate and proactive spam detection.

spamiossly

peeds and

infrastructure

Combat Spam

How do Spammers pet your Email Address?

Chances are there's sowware on your systems that's "phoning home" information about your users whenever they're online. Find out what's lurking on your PCs - look for PostPatrol at

www.soffeholes.com/howese

Stronger Spam-fighters!

Another mark of a growing trend. anti-virus developer Sophos has recently acquired ActiveState. a leading anti-spam specialist.

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### Tackle Spam and More with CA's Content Security

According to CA, the a la carte approach to content security is in trouble. Although many coint solutions gost, they gose challenges such as prigrituation, burger limits interoperability, integration, and managing policy deployment and enforcement across multiple, disconnected platforms. The increase in content threats, such as snam confidentiality breaches, and offensive content, have made it clear that the solution is not just a security matter - both security and business needs must be addressed. There's been a shift in today's market needs and requirements that demand a new model to address today's content challenges. It is increasingly important to look at content security halistically - from an enterprise-wide perspective - addressing security concerns and policy enforcement across various entry points and protocols to respond to blended threats, spam, legal liability, and other content ussues. CA's answer eTrust" Secure Content Management.

12



2000

#### eTrust" Secure Content Management provides:

Spam Filtering - protects against unwanted and unsolicited email, increasing business productivity and network handwidth

Email and Content Security - keyword identification safeguards against the transmission of proprietary or confidential information outside the organization Web Security - you set the policy-based web LIRL filtering

- · Protects you from legal liability should an employee visit an inappropriate website and offend a coworker
- . Employees won't waste time on non-productive web surfing

 Policies preventing the downloading of MP3 and other large files Malicious Code Defense - proactively protects users against a variety of active cryle attacks that can automatically execute when visiting a website or using email Antivirus Protection - dual antivirus engines provide "double protection" to bein



Computer Associates\*



#### CA Completes the Puzzle eTrust" Service Contace

Management is an integrated solution that builds on the strangths of existing antivirus technology while taking content security to the next level. offering the best all-around protection for corporate networks for blended threats spam, web security and everything in between.





ensure users are always protected

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300 million users worldwide rely on Word. Excel. Outlook and PowerPoint to do their jobs. Now Microsoft has taken those oh-so-familiar Office productivity tools and extended their reach to provide a comprehensive. integrated system - the new Microsoft Office System. Designed to work alonoside other Microsoft servers and programs, the Office System packs serious horse power when it comes to enhancing business intelligence, process management, personal productivity and collaboration.



icrosoft Office						
003 Editions	Word					
		•	•			
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udent/Teacher		•	•		7 40	1000
nall Business				299 · 1436	• 200	141
ofessional				-	100	-
o Enterprise						

hase Microsoft' Office Edition 2003 licenses with 3 year Software Assurance (SA)



The New Office Professional Editions Include:

. Enhanced collaboration tools Information Rights Management IRMI functionality that allows you to protect sensitive business information by giving you greater control over who can open, copy print, or forward information . Support for industry-standard

















#### **Process Management**

Ask any project manager about the keys to success and they it tell you process, process, process Good their pie Microsoft Emergence Project Management (EPM) Solution provides the perfect arrower for organizations requiring storing coordination and standardization between projects and project manager, contralized resource management, or higher-level reporting about projects and resources.

The EFM Solution consists of Microsoft Office Project Server 2000, which is the platform that supports proper, server 2000, which is the platform that supports proper, and resource management and collaboration capabilities Users correct to Project Sorver through Microsoft Office Project Professional and Microsoft Office Project Wah Access to asset, enterway, and interact with the Project Server data. The PFM solution allows project manages to substitute projects, assept term microsoft rain or anterior to source of the projects assept term microsoft rain a certain fractionic point to project tasks, and save their information controlly to so it can be shared with others:

#### Personal Productivity

Hieroseff Office Outlook 2003 contains the tools that will have a great impact on personal and state productivity. For enterminents include a new Reading-Plans that displays twoce as much content as before. Outlook 2000 has enhanced fluides and Alerts to help you organize accoming e-mail messages and alert you to within salet-are due to meet a read of the length in all but has the shifty to save the results of commonly used osarches as Search Folders soused of having to end used to the results.

A look at personal productivity tools wouldn't be complete without mentioning Microsoft Doubleck 2003, the roles taking program that great you one place to capture multiple forms or information, including post and hardwritten notes, head-drawn diagrams, audio recordings, before and proteins from the Wish Operation State Plant (and produce and research that information the work you profits; by you capture and research that information the work you profit to you can be the process that information the work you profit to you can be the process that in the microsoft to mended you for each did not be information and read you profit to you can be extend that the profit of the profit of

They're Better Together - Buft with other Microsoft rechnologies in mind, the Microsoft Office System allows you to integrate desktop and server technology to provide business users with better access to information, improved collaboration and increased individuality. Final this details in this Microsoft's latest relaxases on to wear participation contributions. On Microsoft is latest relaxases on to wear participation and contributions.



# Programs Fron: Page 2003, OneNote 2003, Publisher 2003, Project 2003, Visio 2003, InfoPato 2003.



## Services Live Meeting



#### Effective Teaming

For many organizations, improving reaction time is all about effective continuisation and cellaboration To address this need, Hicrosoft Office SharePoils Portal Server 2003 allows you to divelop an intelligent portal that seamlessly connects users, teams, and innovincing as that people can take advantage of relevant information arms sturiess processes.

SharePoint Portal Server 2000 provides a single point of access to multiple systems such as Microsoft Office System programs, business intolligations and project management systems. Users can extract and resure timely and relevant information from systems and reports, and quickly locate and access documents, projects, and test practices across the company.

#### **Business Information**

If you're looking to improve the way you share, reuse, and repurpose information in your organization. Microsoft has the answer. **Microsoft Office infoPath 2003** is a new program in the Microsoft Office System that can help you gether information flexibly and efficiently in nch. dynamic forms.

The information collected can be integrated with a broad range of business processor because informatin supports any customer defined Extensible Markup Language (MM) schema and integrates with Web services. Infordath 2003 also integrates with Microsoft Windows "Share-Point" to further enhance team collaboration. On learn more, with www.softcholoca.com/Wrowser

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in the world of IT, there's nothing more exciting than a new addition to the family. Check out these latest and greatest arrivals with pricing specifications and more at www.softchoice.com/browser

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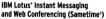
Network Instruments. Get control over your network Observer Suite works with every part of your local and remote network (LAN, 807.11 A/b/n Ginshit W/ANI with features that include superior packet capture and decode, real-time statistics, over 450 Expert Events, robust trending and reporting and custom-trable triggers and alarms so you're the first to know about network problems Observer Suite even offers Application Analysis and Advanced Multi-Probes for the next level of remote monitoring. Now try doing all that with your Darl's rentocol analyzer







Businesses today often incorporate a widely dispersed network of co-workers, suppliers, partners and customers. With this far flung web of associations comes the challenge of working together effectively Good thing the latest electronic connection tools are so effective at bringing people together. As the following solutions show when it comes to productivity, distance should be the last thing on your mind For more info and pricing, go to www.softchoice.com/browser





BM Lotus® Instant Messaging and Web Conferencing (Sametime<sup>(1)</sup>) is a serum entermise mady combined instant messaging and Web conferencing solution for businesses. By providing presence awareness instant messaging and Web

conferencing, Lotus Instant Messaging and Web Conferencing heios speed communication, reduce travel expenses and produce results. With I nous instant Messaging and Web Conferencing, your employees, customers, partners, and suppliers can immediately and easily interact with one another in realtime

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17

**WRO Makes** 

Host-Access Secure WRQ Reflection® for the Web is terminal-emulation software that gives browser users inside and outside the firewall secure access to applications on IRM, HP LINOX and OpenVMS systems. With Reflection's advanced migration administration, and automation capabilities, you can also manage your avolving desktop environmentwhile cutting total cost of ownership Enhanced security ensures safe access to host information for all users-local and remote. Administrators have complete control



## High Tech Horoscopes

Aries Mar. 21-Apr. 19

Jul 23-Jun 22 Winst cramps well prevent you from throwing

ਨ

The shock and confusion of finding out that wrist cramps has nothing to do with either fish or the London Chunnel is only intensified when you realize the whole debacle could have been averted by an ergonomically designed Microsoft Natural Keyboard

Taurus, in keeping with your sometimes

builheaded exterior, you'll no doubt find

vourself drawn to Microsoft's Leather-bound

Mouse. Your workplace

proviously unattainable

a mouse Tost me the

sters didn't see that one

comfort has reached

heights - leather on

coming either

For legal reasons, the stars can't ourranner

you enhanced productivity, but they have a

Taurus Apr. 20-May 20

Virgo

Aug. 23-Sep. 27 Expect to feel betraved by trievision when you find out that your purchase of Microsoft's Trackball Explorer does not in fact quarantee

caution to the wind this week due to your poorly designed keyboard. If only you'd had an ergonomically desproyed keyboard to support

your wrists, and eliminated secess knystrokes with customusble lovs. Do the stars need to spell it out for you here? You need the Wireless Desktop Elite from Microsoft!

missile command Your fury is moderately aligned however by the knowledge that you own the most powerful.





merket today Libra

Sep. 23-Oct. 23 Inter-office gang worters is narrowly everted when you're made privy to the fact that Microsoft's new line of keyboards and mice are in fact available in a ventable

comucogia of colors Scorpio

been expanded.

Oct. 24-Nov. 21 You're delighted to find that Microsoft's new Broadband Networking 10/100 Ethernet Wired Rase Station make setting up your small office to easy a trained chimp could do it. Not as delighted your trained chimp, whose previous responsibilities of earing terranas and doing handstands have now

Scrosoft

Capricorn

TECH HOROSCOPES

18

Dec. 22-Jan. 19 Describe the undersable creative incorrubyou've displayed in making RJ45 cabling a central part of your office decor month one fact remains: Wireless Connectivity is convenions, independent, and simple to implement Capricom, your heart is in the right place -

but form will never outstrip function.

**Aguarius** Jan. 20-Feb. 18

With Venus' ascersion into the house of Mars. you'll suprise thousands and flout cross-species boundaries when you fall hoad-over-wheels in love with the sleek design of Microsoft's new Virgless Intellitouse Explorer.

Pisces Feb. 19-Mar. 20

softchoice



Wireless connectivity and unfettered mobility is brought to the masses through Microsoft's line of Wireless Routers and Access Points. Your Piscolan enthusiasm is understandable, but you should resist urge: to take your laptop into the pool with you.

**Hotebook Adapter** well get you clean to your lifelong dream of sending emails while "using the facilities" Cancer

Gemini

May 21-Jun. 21

sneeking suspicion that

a Microsoft Wireless



The sheer variety and 6 month battery life of Microsoft's new line of wireless mice are the key motivators behind your decision to have 8 extra hands surpically attached.

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What's more important than security? Not much, unless it's the high-performance features that give you broader control over your systems. If those seen like opposing objectives, it's time to check to thomNifees SF Mus Series CVM Switches from Bellin. With enhancing, SE security and monovathe technology, SE SF list lest you switch between as many as 16 FS/2 and USB servers from one FS/2 conside—without compromising retwork security. It keeps hacken away from your critical data by directly noting input and output critical data by directly noting input and output critical data by directly noting input and output security.

security. It keeps nacers away from your critical data by directly routing input and output signals to each computer, preventing unintended information exchange. That's a secure feeling. With any pending EAL 4 rating, it's like knowing no one's my to drive out of the lot in your car while that my guard's on duty.

connect your servers. The tall guy's watching.

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